

Jan- Delacat

Access DB# 121534

# SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Sabika Qazi Examiner #: 74141 Date: 5/7/04  
Alt Unit: 1616 Phone Number: 261622 Serial Number: 10/052,908  
Mail Box and Bldg Room Location: 4C70 Room 4445 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need. MEJ

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include selected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc. if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Methods of Sterilizing with decarboxyl  
Inventors (please provide full names): Singh, W. et al. acids

Earliest Priority Filing Date: 12/8/2000 Div. of 09/733,611

\*Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Please search for

- ① composition containing one or more <sup>per</sup> decarboxylate acids. (any use).
- ② Use for Sterilization, disinfectant etc.

Please do Text + Inventor Search  
May include internet.

Thank you

## STAFF USE ONLY

	Type of Search	Vendors and cost where applicable
Searcher: <u>Jan</u>	NA Sequence (#) _____	STN <input checked="" type="checkbox"/>
Searcher Phone #: <u>22504</u>	AA Sequence (#) _____	Dialog _____
Search Location: _____	Structure (#) <input checked="" type="checkbox"/>	Questel/Orbit _____
Date Searcher Picked Up: <u>5/8</u>	Bibliographic _____	Dr. Link _____
Date Completed: <u>5/8</u>	Litigation _____	Lexis/Nexis _____
Searcher Prep & Review Time _____	Fulltext _____	Sequence Systems _____
Officer Prep Time: <u>10</u>	Patent Family _____	WWW/Internet _____
Online Time: <u>+35</u>	Other _____	Other (specify) _____

=> fil reg

FILE 'REGISTRY' ENTERED AT 16:08:14 ON 08 MAY 2004  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2004 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file  
provided by InfoChem.

STRUCTURE FILE UPDATES: 7 MAY 2004 HIGHEST RN 680859-76-1  
DICTIONARY FILE UPDATES: 7 MAY 2004 HIGHEST RN 680859-76-1

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

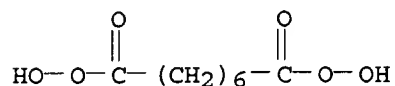
Please note that search-term pricing does apply when  
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more  
information enter HELP PROP at an arrow prompt in the file or refer  
to the file summary sheet on the web at:  
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=> d ide can tot 17

L7 ANSWER 1 OF 6 REGISTRY COPYRIGHT 2004 ACS on STN  
RN 28317-47-7 REGISTRY  
CN Octanediperoxoic acid (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Peroxysuberic acid (6CI, 7CI)  
OTHER NAMES:  
CN **Dipersuberic acid**  
FS 3D CONCORD  
MF C8 H14 O6  
CI COM  
LC STN Files: BEILSTEIN\*, CA, CAOLD, CAPLUS, TOXCENTER, USPATFULL  
(\*File contains numerically searchable property data)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

8 REFERENCES IN FILE CA (1907 TO DATE)  
8 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 137:145669  
REFERENCE 2: 130:268876  
REFERENCE 3: 128:140518  
REFERENCE 4: 121:244251  
REFERENCE 5: 117:90115  
REFERENCE 6: 77:113764

REFERENCE 7: 56:79083

REFERENCE 8: 51:66398

L7 ANSWER 2 OF 6 REGISTRY COPYRIGHT 2004 ACS on STN

RN 28317-46-6 REGISTRY

CN Pentanediperoxoic acid (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Peroxyglutaric acid (6CI)

OTHER NAMES:

CN **Diperglutaric acid**

CN Diperoxyglutaric acid

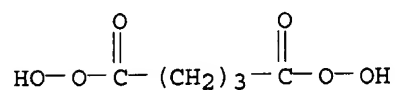
CN Perglutaric acid

FS 3D CONCORD

MF C5 H8 O6

CI COM

LC STN Files: BEILSTEIN\*, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, IFICDB,  
IFIPAT, IFIUDB, PROMT, TOXCENTER, USPAT2, USPATFULL  
(\*File contains numerically searchable property data)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

51 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

51 REFERENCES IN FILE CAPLUS (1907 TO DATE)

1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 140:82213

REFERENCE 2: 139:256703

REFERENCE 3: 138:390861

REFERENCE 4: 137:175031

REFERENCE 5: 137:145669

REFERENCE 6: 136:279033

REFERENCE 7: 136:135829

REFERENCE 8: 135:253251

REFERENCE 9: 135:127208

REFERENCE 10: 135:97456

L7 ANSWER 3 OF 6 REGISTRY COPYRIGHT 2004 ACS on STN

RN 5824-51-1 REGISTRY

CN Hexanediperoxoic acid (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

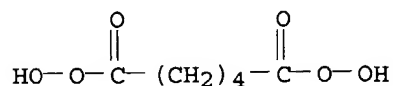
CN Peroxyadipic acid (6CI, 7CI, 8CI)

OTHER NAMES:

CN Adipic diperoxyacid

CN **Diperadipic acid**

CN Diperoxyadipic acid  
CN Peradipic acid  
FS 3D CONCORD  
MF C6 H10 O6  
CI COM  
LC STN Files: BEILSTEIN\*, CA, CAOLD, CAPLUS, CASREACT, IFICDB, IFIPAT,  
IFIUDB, TOXCENTER, USPAT2, USPATFULL  
(\*File contains numerically searchable property data)



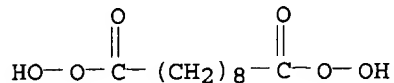
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

58 REFERENCES IN FILE CA (1907 TO DATE)  
6 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
58 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
4 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 139:354579  
REFERENCE 2: 137:145669  
REFERENCE 3: 136:279033  
REFERENCE 4: 136:135829  
REFERENCE 5: 135:82069  
REFERENCE 6: 135:82067  
REFERENCE 7: 135:78599  
REFERENCE 8: 133:79452  
REFERENCE 9: 133:3966  
REFERENCE 10: 132:156320

L7 ANSWER 4 OF 6 REGISTRY COPYRIGHT 2004 ACS on STN  
RN 5796-85-0 REGISTRY  
CN Decanediperoxoic acid (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Peroxysebacic acid (6CI, 7CI, 8CI)  
OTHER NAMES:  
CN Diperoxysebacic acid  
CN **Dipersebacic acid**  
CN Persebacic acid  
FS 3D CONCORD  
MF C10 H18 O6  
CI COM  
LC STN Files: BEILSTEIN\*, CA, CAOLD, CAPLUS, CHEMLIST, IFICDB, IFIPAT,  
IFIUDB, TOXCENTER, USPAT2, USPATFULL  
(\*File contains numerically searchable property data)  
Other Sources: EINECS\*\*  
(\*Enter CHEMLIST File for up-to-date regulatory information)



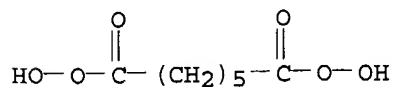


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

42 REFERENCES IN FILE CA (1907 TO DATE)  
 2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 42 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
 8 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 139:354579  
 REFERENCE 2: 136:279033  
 REFERENCE 3: 133:79452  
 REFERENCE 4: 133:3966  
 REFERENCE 5: 129:246906  
 REFERENCE 6: 128:238644  
 REFERENCE 7: 128:140518  
 REFERENCE 8: 127:105399  
 REFERENCE 9: 122:30236  
 REFERENCE 10: 121:194515

L7 ANSWER 5 OF 6 REGISTRY COPYRIGHT 2004 ACS on STN  
 RN 2455-27-8 REGISTRY  
 CN Heptanediperoxoic acid (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Peroxypimelic acid (6CI, 7CI, 8CI)  
 OTHER NAMES:  
 CN **Diperpimelic acid**  
 FS 3D CONCORD  
 MF C7 H12 O6  
 CI COM  
 LC STN Files: BEILSTEIN\*, CA, CAOLD, CAPLUS, TOXCENTER, USPATFULL  
 (\*File contains numerically searchable property data)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

5 REFERENCES IN FILE CA (1907 TO DATE)  
 5 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
 2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 137:145669  
 REFERENCE 2: 130:268876

REFERENCE 3: 128:140518

REFERENCE 4: 77:113764

REFERENCE 5: 51:66398

L7 ANSWER 6 OF 6 REGISTRY COPYRIGHT 2004 ACS on STN

RN 1941-79-3 REGISTRY

CN Nonanediperoxoic acid (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Peroxyazelaic acid (6CI, 7CI, 8CI)

OTHER NAMES:

CN Azelaic diperacid

CN **Diperazelaic acid**

CN Diperoxyazelaic acid

FS 3D CONCORD

MF C9 H16 O6

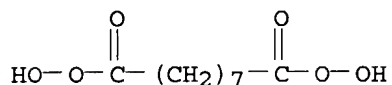
CI COM

LC STN Files: BEILSTEIN\*, BIOBUSINESS, CA, CAOLD, CAPLUS, CHEMLIST, IFICDB, IFIPAT, IFIUDB, TOXCENTER, USPAT2, USPATFULL

(\*File contains numerically searchable property data)

Other Sources: EINECS\*\*, NDSL\*\*, TSCA\*\*

(\*\*Enter CHEMLIST File for up-to-date regulatory information)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

58 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

58 REFERENCES IN FILE CAPLUS (1907 TO DATE)

3 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 139:354579

REFERENCE 2: 137:145669

REFERENCE 3: 134:149334

REFERENCE 4: 130:256816

REFERENCE 5: 130:254092

REFERENCE 6: 130:143594

REFERENCE 7: 130:130068

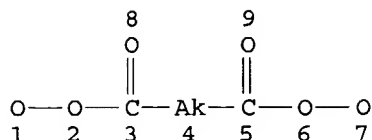
REFERENCE 8: 129:246906

REFERENCE 9: 128:140518

REFERENCE 10: 127:105399

=> d sta que l10

L8 STR



## NODE ATTRIBUTES:

CONNECT IS M1 RC AT 1  
 CONNECT IS M1 RC AT 7  
 DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

## GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 9

## STEREO ATTRIBUTES: NONE

L10 387 SEA FILE=REGISTRY CSS FUL L8

100.0% PROCESSED 3434 ITERATIONS  
 SEARCH TIME: 00.00.01

387 ANSWERS

=> d his

(FILE 'HOME' ENTERED AT 15:38:09 ON 08 MAY 2004)  
 SET COST OFF

FILE 'REGISTRY' ENTERED AT 15:38:20 ON 08 MAY 2004

E DIPERGLUTARIC ACID/CN  
 L1 1 S E3  
 E DIPERADIPIC ACID/CN  
 L2 1 S E3  
 E DIPERPIMELIC ACID/CN  
 L3 1 S E3  
 E DIPERSUBERIC ACID/CN  
 L4 1 S E3  
 E DIPERSEBACIC ACID/CN  
 L5 1 S E3  
 E DIPERAZELAIC ACID/CN  
 L6 1 S E3  
 L7 6 S L1-L6  
 L8 STR  
 L9 18 S L8 CSS SAM  
 L10 387 S L8 CSS FUL  
 SAV L10 QAZI052/A  
 L11 106 S L10 AND NC>=2  
 L12 82 S L10 AND (PMS OR MXS OR IDS)/CI NOT L11  
 L13 199 S L10 NOT L11,L12  
 L14 36 S L13 AND NR>=1  
 L15 163 S L13 NOT L14

FILE 'HCAPLUS' ENTERED AT 15:43:57 ON 08 MAY 2004

L16 142 S L7  
 L17 544 S L15  
 L18 37 S L14  
 L19 20 S (DIPERGLUTARIC OR DIPERADIPIC OR DIPERPIMELIC OR DIPERSUBERIC  
 L20 35 S (PERGLUTARIC OR PERADIPIC OR PERPIMELIC OR PERSUBERIC OR PERS  
 L21 43 S (DIPEROXYGLUTARIC OR DIPEROXYADIPIC OR DIPEROXPIMELIC OR DIP  
 L22 53 S (PEROXYGLUTARIC OR PEROXYADIPIC OR PEROXPIMELIC OR PEROXYSUB

L23 24 S (PENTANEDIPEROXOIC OR HEXANEDIPEROXOIC OR HEPTANEDIPEROXOIC O  
 L24 579 S L16-L23  
 L25 1 S DIPERCARBOXYLIC ACID  
 L26 72 S (CARBOXYLIC#(L)ACID#)/CW (L) (DIPEROX? OR DI(L)PEROX?)  
 L27 639 S L24-L26

FILE 'REGISTRY' ENTERED AT 15:50:48 ON 08 MAY 2004

L28 1 S MAGNESIUM SULFATE/CN  
 L29 1 S SODIUM SULFATE/CN  
 L30 22705 S 7664-93-9/CRN  
 L31 319 S L30 AND MG/ELS  
 L32 1591 S L30 AND NA/ELS  
 L33 32 S L31 AND 4/ELC.SUB  
 L34 33 S L32 AND 4/ELC.SUB  
 L35 65 S L33,L34  
 L36 55 S L35 NOT (MNS OR PMS OR CCS OR AYS OR IDS)/CI  
 L37 13 S L36 AND 2/NC  
 L38 42 S L36 NOT L37  
 L39 32 S L38 NOT H2O2  
 L40 31 S L39 NOT MXS/CI  
 L41 33 S L28,L29,L40

FILE 'HCAPLUS' ENTERED AT 15:53:22 ON 08 MAY 2004

L42 23 S L41 AND L27  
 L43 65 S (NA2SO4 OR MGSO4 OR (NA OR NA2 OR SODIUM OR DISODIUM OR MG OR  
 E ALKALINE EARTH SALT/CT  
 E E4+ALL  
 L44 17 S L27 AND E5,E6,E4+NT,OLD,PFT  
 E E77+ALL  
 L45 5 S L27 AND E6+NT  
 E ALKALI METAL SALT/CT  
 E E4+ALL  
 L46 95 S L27 AND E5,E6,E4+OLD,NT,PFT  
 E E217+ALL  
 L47 9 S L27 AND E6+NT  
 L48 138 S L42-L47  
 E LYNNTECH/PA,CS  
 L49 104 S E3-E25  
 E LYNN TECH/PA,CS  
 E SINGHW/AU  
 E SINGH W/AU  
 L50 28 S E3,E8,E15-E18  
 E GILETTO A/AU  
 L51 15 S E3,E4  
 E HITCHENS G/AU  
 L52 48 S E4,E5  
 L53 2 S L27 AND L49-L52  
 L54 7 S L27 AND EXOTHERM?  
 L55 142 S L48,L54  
 L56 139 S L55 AND (PY<=2000 OR PRY<=2000 OR AY<=2000)  
 L57 16 S L56 AND ?POWD?  
 L58 5 S L56 AND ?COLLOID?  
 L59 7 S L56 AND ?CRYS?  
 L60 1 S L56 AND ?TABLET?  
 L61 28 S L57-L60  
 L62 27 S L61 AND L16-L18  
 L63 2 S L61 AND L25,L26  
 L64 28 S L62,L63  
 E DISINFECT/CT  
 E E12+ALL  
 L65 1565 S E1  
 E E2+AL  
 E E3+ALL

L66 13112 S E2-E4,E1+OLD,NT,PFT  
E E8+ALL  
L67 2594 S E3+NT  
E E6+ALL  
L68 39330 S E1+NT  
E E29+ALL  
E E9+ALL  
L69 53898 S E5-E8,E4+NT  
L70 7 S L56 AND L65-L69  
L71 37 S L27 AND L65-L69  
L72 35 S L71 AND (PY<=2000 OR PRY<=2000 OR AY<=2000)  
L73 65 S L53,L64,L70,L71,L72  
L74 63 S L73 AND (PY<=2000 OR PRY<=2000 OR AY<=2000)  
L75 33 S L74 AND (DISINFECT? OR ANTISEPT? OR STERIL?)  
L76 28 S L74 AND (?POWD? OR ?COLLOID? OR ?CRYS? OR ?TABLET?)  
L77 26 S L74 AND STABIL?  
L78 18 S L74 AND STABL?  
L79 0 S L74 AND ?STANN?  
L80 2 S L73 NOT L74  
L81 63 S L74-L78  
L82 58 S L81 AND P/DT  
L83 10 S L82 AND US/PC.B  
L84 5 S L81 NOT L82  
L85 53 S L81,L82 NOT L83

FILE 'REGISTRY' ENTERED AT 16:08:14 ON 08 MAY 2004

=> fil hcaplus

FILE 'HCAPLUS' ENTERED AT 16:09:15 ON 08 MAY 2004

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 8 May 2004 VOL 140 ISS 20

FILE LAST UPDATED: 7 May 2004 (20040507/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d l83 all hitstr tot

L83 ANSWER 1 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN  
AN 2002:595512 HCAPLUS  
DN 137:145669  
ED Entered STN: 09 Aug 2002  
TI Methods of sterilizing with dipercarboxylic  
acids  
IN Singh, Waheguru Pal; Giletto, Anthony; Hitchens,  
G. Duncan  
PA USA  
SO U.S. Pat. Appl. Publ., 9 pp.

CODEN: USXXCO  
 DT Patent  
 LA English  
 IC ICM A61K031-19  
 NCL 514557000  
 CC 63-8 (Pharmaceuticals)  
 Section cross-reference(s): 23

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2002107288	A1	20020808	US 2000-733611	20001208 <--
	US 2002188026	A1	20021212	US 2001-52908	20011029 <--
PRAI	US 2000-733611	A3	20001208	<--	

AB Dry **dipercarboxylic acid** material and methods of using dry **dipercarboxylic acid** particulates to form novel **sterilizing** solns. or liquid chemical germicides. The **dipercarboxylic acids** or organic diperoxygen compds. can be synthesized and isolated as solid **powders** with an extended shelf life. The **powders** are also soluble in water for quickly preparing liquid **disinfectant** solns., whenever and wherever desired, from a potable water source. The dry **dipercarboxylic acid** materials are selected from **diperglutaric acid**, **diperadipic acid**, **diperpimelic acid**, **dipersuberic acid**, and **diperazelaic acid**. Upon dissoln. into water, these compds. have demonstrated the ability to inactivate high nos. of spores, including **sterilization** of medical equipment in 10 min at room temperature. The average dim. of zone of inhibition of **diperglutaric acid** at a concentration of 0.33% against Staphylococcus aureus, Pseudomonas aeruginosa, and Escherichia coli was 10 mm, while glutaric acid at 1% had no zone of inhibition.

ST **sterilization dipercarboxylic acid** germicides

IT Quaternary ammonium compounds, biological studies  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
 (aliphatic long chain; methods of **sterilizing** with **dipercarboxylic acids**)

IT Fatty acids, biological studies  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
 (aliphatic; methods of **sterilizing** with **dipercarboxylic acids**)

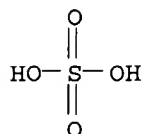
IT **Alkali metal salts**  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
 (hydrated; methods of **sterilizing** with **dipercarboxylic acids**)

IT **Disinfectants**  
 Solubilizers  
 Sporicides  
 (methods of **sterilizing** with **dipercarboxylic acids**)

IT **Alkaline earth salts**  
 Salts, biological studies  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
 (methods of **sterilizing** with **dipercarboxylic acids**)

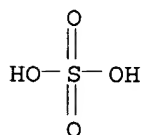
IT **Carboxylic acids**, biological studies  
 RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (**peroxy**, **di**-; methods of **sterilizing** with

- dipercarboxylic acids)
- IT 7487-88-9, Magnesium sulfate, biological studies 7757-82-6, Sodium sulfate, biological studies  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
 (methods of sterilizing with dipercarboxylic acids)
- IT 1941-79-3P, Diperazelaic acid.  
 2455-27-8P, Diperpimelic acid  
 5824-51-1P, Diperadipic acid  
 28317-46-6P, Diperglutaric acid  
 28317-47-7P, Dipersuberic acid  
 RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (methods of sterilizing with dipercarboxylic acids)
- IT 64-17-5, Ethanol, uses  
 RL: NUU (Other use, unclassified); USES (Uses)  
 (methods of sterilizing with dipercarboxylic acids)
- IT 7722-84-1, Hydrogen peroxide., reactions  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (methods of sterilizing with dipercarboxylic acids)
- IT 7487-88-9, Magnesium sulfate, biological studies 7757-82-6, Sodium sulfate, biological studies  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
 (methods of sterilizing with dipercarboxylic acids)
- RN 7487-88-9 HCAPLUS  
 CN Sulfuric acid magnesium salt (1:1) (8CI, 9CI) (CA INDEX NAME)



● Mg

- RN 7757-82-6 HCAPLUS  
 CN Sulfuric acid disodium salt (8CI, 9CI) (CA INDEX NAME)



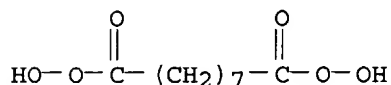
●2 Na

- IT 1941-79-3P, Diperazelaic acid.

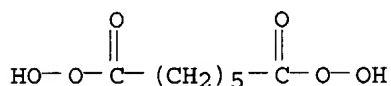
2455-27-8P, Diperpimelic acid  
 5824-51-1P, Diperadipic acid  
 28317-46-6P, Diperglutaric acid  
 28317-47-7P, Dipersuberic acid

RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (methods of sterilizing with dipercarboxylic acids)

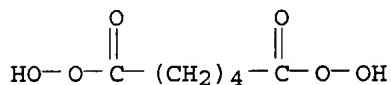
RN 1941-79-3 HCAPLUS  
 CN Nonanediperoxoic acid (9CI) (CA INDEX NAME)



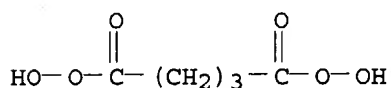
RN 2455-27-8 HCAPLUS  
 CN Heptanediperoxoic acid (9CI) (CA INDEX NAME)



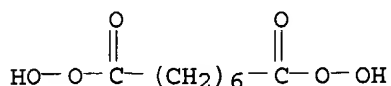
RN 5824-51-1 HCAPLUS  
 CN Hexanediperoxoic acid (9CI) (CA INDEX NAME)



RN 28317-46-6 HCAPLUS  
 CN Pentanediperoxoic acid (9CI) (CA INDEX NAME)



RN 28317-47-7 HCAPLUS  
 CN Octanediperoxoic acid (9CI) (CA INDEX NAME)



L83 ANSWER 2 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 2001:499742 HCAPLUS  
 DN 135:97456  
 ED Entered STN: 11 Jul 2001  
 TI **Sterilization** of surgical sites and use of biocide compositions  
 IN Simpson, Charles Lee  
 PA Sulzer Carbomedics Inc., USA  
 SO U.S., 5 pp.  
 CODEN: USXXAM



DT Patent  
 LA English  
 IC ICM B01D017-06  
 ICS C25F001-00; A61B018-04; A61D001-10  
 NCL 205687000  
 CC 63-6 (Pharmaceuticals)  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6258249	B1	20010710	US 1999-437597	19991110 <--
PRAI	US 1999-437597		19991110 <--		
AB	A method for the treatment of an infected area within a body. The method comprises applying a elec. conductive biocide composition to an infected area within a body that has been exposed during surgery. Then, an elec. field is applied to the biocide composition. The elec. field strength and duration of application may be sufficient to produce killing of microorganisms in the infected area.				
ST	<b>sterilization</b> surgical site biocide				
IT	Antibiotics (aminoglycoside; <b>sterilization</b> of surgical sites and use of biocide compns.)				
IT	Antibacterial agents (iodophors; <b>sterilization</b> of surgical sites and use of biocide compns.)				
IT	Antibiotics (macrolide; <b>sterilization</b> of surgical sites and use of biocide compns.)				
IT	Antibiotics (quinolone; <b>sterilization</b> of surgical sites and use of biocide compns.)				
IT	Antibiotics Bacteria (Eubacteria) Biocides <b>Disinfectants</b> Electric field Fungi Fungicides <b>Sterilization and Disinfection</b> Surgery Thickening agents Yeast ( <b>sterilization</b> of surgical sites and use of biocide compns.)				
IT	Alcohols, biological studies Aldehydes, biological studies Quaternary ammonium compounds, biological studies Sulfonamides RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) ( <b>sterilization</b> of surgical sites and use of biocide compns.)				
IT	13721-01-2D, derivs., antibiotics RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (Quinolone antibiotics; <b>sterilization</b> of surgical sites and use of biocide compns.)				
IT	50-00-0, Formaldehyde, biological studies 55-56-1, Chlorhexidine 59-87-0, Nitrofurazone 60-54-8, Tetracycline 67-20-9, Nitrofurantoin 70-30-4, Hexachlorophene 79-21-0, Peroxyacetic acid 100-97-0, Methenamine, biological studies 107-22-2, Glyoxal 110-00-9, Furan 111-30-8, Glutaraldehyde 123-23-9, Succinyl peroxide 288-32-4, Imidazole, biological studies 542-78-9, Malonaldehyde 638-37-9, Succinaldehyde 818-85-9, Peroxyheptanoic acid 1072-21-5, Adipaldehyde 1406-05-9, Penicillin 3058-35-3, Peroxynonanoic acid 3380-34-5, Triclosan 3851-97-6, Monoperglutaric acid 7429-90-5D, Aluminum, compds., biological studies 7439-89-6D, Iron, compds., biological studies 7439-92-1D, Lead, compds., biological studies 7439-96-5D,				

Manganese, compds., biological studies 7439-97-6D, Mercury, compds., biological studies 7440-02-0D, Nickel, compds., biological studies 7440-22-4D, Silver, compds., biological studies 7440-31-5D, Tin, compds., biological studies 7440-48-4D, Cobalt, compds., biological studies 7440-50-8D, Copper, compds., biological studies 7440-57-5D, Gold, compds., biological studies 7440-66-6D, Zinc, compds., biological studies 7553-56-2, Iodine, biological studies 7681-52-9, Sodium hypochlorite 7722-84-1, Hydrogen peroxide, biological studies 7778-54-3, Calcium hypochlorite 7782-50-5, Chlorine, biological studies 7790-92-3, Hypochlorous acid 10049-04-4, Chlorine dioxide 11111-12-9, Cephalosporin 14380-61-1, Hypochlorite 25655-41-8, Povidone-iodine 28317-46-6, **Diperglutaric acid** 56961-14-9

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(sterilization of surgical sites and use of biocide compns.)

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD  
RE

- (1) Anon; EP 0147970 A1 1985 HCAPLUS
- (2) Costerton; US 4419248 1983 HCAPLUS
- (3) Costerton; US 4542169 1985
- (4) Costerton; US 4800959 1989
- (5) Costerton; US 5174378 1992 HCAPLUS
- (6) Costerton; US 5312813 1994 HCAPLUS
- (7) Woodson; US 5462644 1995

IT 7681-52-9, Sodium hypochlorite 7778-54-3, Calcium hypochlorite 28317-46-6, **Diperglutaric acid**

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(sterilization of surgical sites and use of biocide compns.)

RN 7681-52-9 HCAPLUS

CN Hypochlorous acid, sodium salt (8CI, 9CI) (CA INDEX NAME)

Cl-OH

● Na

RN 7778-54-3 HCAPLUS

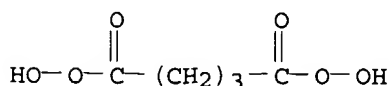
CN Hypochlorous acid, calcium salt (8CI, 9CI) (CA INDEX NAME)

Cl-OH

● 1/2 Ca

RN 28317-46-6 HCAPLUS

CN Pentanediperoxoic acid (9CI) (CA INDEX NAME)



L83 ANSWER 3 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1995:772970 HCAPLUS

DN 123:197184

ED Entered STN: 02 Sep 1995  
 TI Synergistic peroxy acid antimicrobial compositions.  
 IN Oakes, Thomas R.; Boufford, Thomas G.  
 PA Ecolab Inc., USA  
 SO U.S., 13 pp. Cont.-in-part of U.S. 5, 200, 189.  
 CODEN: USXXAM  
 DT **Patent**  
 LA English  
 IC ICM A01N037-02  
 NCL 424405000  
 CC 17-4 (Food and Feed Chemistry)  
 Section cross-reference(s): 63  
 FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5437868	A	19950801	US 1993-47264	19930412 <--
	US 5200189	A	19930406	US 1991-734580	19910723 <--
	ZA 9202751	A	19921230	ZA 1992-2751	19920415 <--
	CA 2108177	AA	19930124	CA 1992-2108177	19920529 <--
	CN 1068705	A	19930210	CN 1992-103834	19920529 <--
	CN 1050734	B	20000329		
	AT 161142	E	19980115	AT 1992-913905	19920529 <--
	ES 2112908	T3	19980416	ES 1992-913905	19920529 <--
	US 5314687	A	19940524	US 1992-932612	19920820 <--
	US 5718910	A	19980217	US 1993-4075	19930113 <--
	WO 9423575	A1	19941027	WO 1994-US2134	19940224 <--
	W: AU, CA, CN, JP, NZ				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	AU 9465867	A1	19941108	AU 1994-65867	19940224 <--
	AU 676902	B2	19970327		
	EP 693876	A1	19960131	EP 1994-913884	19940224 <--
	EP 693876	B1	19980708		
	EP 693876	B2	20011024		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	AT 167981	E	19980715	AT 1994-913884	19940224 <--
	US 5489434	A	19960206	US 1995-402629	19950313 <--
PRAI	US 1991-734580	A2	19910723 <--		
	US 1993-47264	A	19930412 <--		
	WO 1994-US2134	W	19940224 <--		
AB	A synergistic peroxy acid antimicrobial concentrate comprises <b>peroxyglutaric acid</b> in combination with a C1-4 peroxyacid and/or a C6-18 peroxyacid. Other components can be added to the composition such as hydrotrope coupling agents, <b>stabilizers</b> , etc. An effective antimicrobial solution is formed, at low concns., when the concentrate is diluted with water. Sanitizing of fixed, in-place, processing lines in dairies, breweries, and other food processing operations is one utility of the composition				
ST	synergism peroxy acid microbicide				
IT	Food (industry, synergistic peroxy acid antimicrobial compns.)				
IT	Acids, biological studies RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (peroxy, synergistic antimicrobial compns. containing)				
IT	<b>Bactericides, Disinfectants, and Antiseptics</b> Fungicides and Fungistats Virucides and Virustats (synergistic, peroxy acids-containing compns.)				
IT	159835-08-2	167770-73-2	167770-74-3	167770-75-4	167770-76-5 167770-77-6
	RL: BAC (Biological activity or effector, except adverse); BSU (Biological				

study, unclassified); FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(synergistic antimicrobial compns.)

L83 ANSWER 4 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN  
AN 1994:460263 HCAPLUS  
DN 121:60263  
ED Entered STN: 06 Aug 1994  
TI Bleach granules containing peroxy acid and hydratable inorganic compound  
IN Ploumen, Jan J. H.; Edelij, Herman J.; Reijnen, Jan J. M.  
PA Akzo N.V., Neth.  
SO U.S., 7 pp. Cont.-in-part of U.S. 5,049,298.  
CODEN: USXXAM  
DT **Patent**  
LA English  
IC ICM C11D007-54  
ICS C01B015-00  
NCL 252095000  
CC 46-5 (Surface Active Agents and Detergents)  
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5296156	A	19940322	US 1991-722985	19910628 <--
	US 5049298	A	19910917	US 1989-436994	19891115 <--
PRAI	EP 1988-202691		19881125 <--		
	US 1989-436994		19891115 <--		
AB	Free-flowing, storage- <b>stable</b> , water-soluble bleach granules, especially useful in laundry detergent compns., are prepared by mixing $\geq 1$ water-insol. peroxy acid, e.g., $\text{HOOC(O)(CH}_2\text{)}_{10}\text{C(O)OOH}$ or $\text{R(CH}_2\text{)}_5\text{C(O)OOH}$ (R = phthalimido), with a hydratable inorg. compound, e.g., <b>Na<sub>2</sub>SO<sub>4</sub></b> , at a water content below the maximum hydration water content of the inorg. compound and at a temperature below the hydration temperature of the inorg. compound, increasing the temperature to at least the hydration temperature of the inorg. compound, and forming the <b>powder</b> into granules having diameter 0.1-5 mm. The granules optionally contain $\leq 10\%$ surfactant and $\leq 15\%$ water-insol. organic compound				
ST	peroxy acid bleach granulation <b>stability</b> ; peroxydodecanedioic acid bleach granulation; peroxyhexanoic deriv bleach granulation; laundry detergent peroxy acid bleach; <b>sodium sulfate</b> hydration granulation bleach				
IT	Granulation (of peroxy acid bleach with hydratable inorg. compound, for detergents)				
IT	Bleaching agents (peroxy acids, granulation of hydratable inorg. compound with, for detergents)				
IT	Detergents (laundry, bleaching agents for use in, peroxy acids as, granulation of)				
IT	Carboxylic acids, uses RL: USES (Uses) (peroxy, bleaching agents, granulation of, with hydratable inorg. compound)				
IT	<b>1941-79-3, Nonanediperoxoic acid</b> <b>66280-55-5, Diperoxydodecanedioic acid</b> <b>68575-79-1, Diperoxytridecanedioic acid</b> <b>104788-63-8, 6-Nonylamino-6-oxoperoxyhexanoic acid</b> <b>104788-71-8, N-Dodecanoyl-6-aminoperoxyhexanoic acid</b> <b>104788-72-9, N-Decanoyl-6-aminoperoxyhexanoic acid</b> <b>111875-82-2, 4-Nonylamino-4-oxoperoxybutanoic acid</b> <b>128275-31-0, 6-Phthalimidoperoxyhexanoic acid</b> RL: USES (Uses) (bleaching agents, granulation of hydratable inorg. compound with)				
IT	<b>7757-82-6, Sodium sulfate, uses</b>				

RL: USES (Uses)

(in granulation of peroxy acids as bleaching agents)

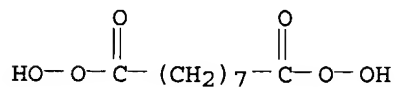
IT 1941-79-3, **Nonanediperoxoic acid**  
 66280-55-5, Diperoxydodecanedioic acid 68575-79-1,  
 Diperoxytridecanedioic acid

RL: USES (Uses)

(bleaching agents, granulation of hydratable inorg. compound with)

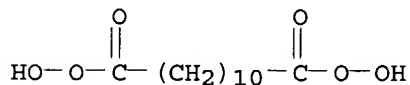
RN 1941-79-3 HCAPLUS

CN Nonanediperoxoic acid (9CI) (CA INDEX NAME)



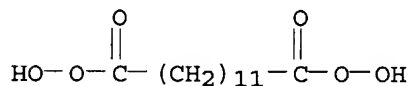
RN 66280-55-5 HCAPLUS

CN Dodecanediperoxoic acid (9CI) (CA INDEX NAME)



RN 68575-79-1 HCAPLUS

CN Tridecanediperoxoic acid (9CI) (CA INDEX NAME)

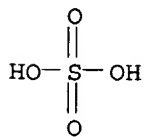
IT 7757-82-6, **Sodium sulfate**, uses

RL: USES (Uses)

(in granulation of peroxy acids as bleaching agents)

RN 7757-82-6 HCAPLUS

CN Sulfuric acid disodium salt (8CI, 9CI) (CA INDEX NAME)



● 2 Na

L83 ANSWER 5 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1990:574519 HCAPLUS

DN 113:174519

ED Entered STN: 09 Nov 1990

TI Granular peroxydicarboxylic acid bleaches with less tendency to decompose or detonate

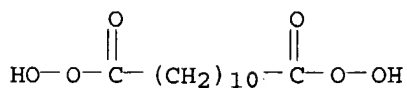
IN Foster, Jeffrey N.; Karpusiewicz, William M.; Irwin, Charles F.; Pham, Hien T.; Aronson, Michael P.

PA Lever Brothers Co., USA

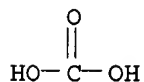
SO U.S., 4 pp. Cont.-in-part of U.S. Ser. No. 246,836, abandoned.

CODEN: USXXAM  
 DT Patent  
 LA English  
 IC ICM C11D003-395  
 ICS C11D003-39; D06L003-02  
 NCL 252095000  
 CC 46-5 (Surface Active Agents and Detergents)  
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4917811	A	19900417	US 1989-292692	19890103 <--
	EP 360323	A2	19900328	EP 1989-202253	19890906 <--
	EP 360323	A3	19901107		
	R: CH, DE, ES, FR, GB, IT, LI, NL, SE				
	CA 1312417	A1	19930112	CA 1989-611487	19890914 <--
	AU 8941499	A1	19900329	AU 1989-41499	19890919 <--
	AU 616304	B2	19911024		
	BR 8904698	A	19900501	BR 1989-4698	19890919 <--
	JP 02133496	A2	19900522	JP 1989-244884	19890920 <--
	JP 06031421	B4	19940427		
	ZA 8907182	A	19910529	ZA 1989-7182	19890920 <--
PRAI	US 1988-246836		19880920 <--		
	US 1989-292692		19890103 <--		
AB	The title compns., useful in laundry detergents, contain 1-45% aliphatic peroxy acid and 35-99% alkaline hydratable alkali metal salts forming 1% aqueous solns. with pH $\geq 8.5$ and are formed by absorbing all water used as water of hydration. A dispersion of 24.6 g powdered 61.7:38.3 diperoxydodecanedioic acid- <b>Na2SO4</b> in 15 g H2O was sprayed onto 34.23 g Na2HPO4 in a drum mixer to give granules (60% +35 to -10 mesh) with autoignition temperature $\geq 200^\circ$ .				
ST	diperoxydodecanedioic acid bleach <b>stable</b> ; peroxycarboxylic acid bleach <b>stabilization</b> ; phosphate <b>stabilization</b> peroxycarboxylic bleach; safety peroxycarboxylic bleach; explosion prevention peroxycarboxylate bleach				
IT	Granulation (of peroxycarboxylic acid bleaches, for <b>stability</b> and detonation resistance)				
IT	Bleaching agents (peroxycarboxylic acids, granules, manufacture of detonation-resistant)				
IT	Explosion (prevention of, in peroxycarboxylic acid bleach granulation)				
IT	Carboxylic acids, uses and miscellaneous RL: USES (Uses) (peroxy, bleaching agents, manufacture of granular and detonation-resistant)				
IT	<b>66280-55-5</b> , Diperoxydodecanedioic acid RL: USES (Uses) (bleaching agents, manufacture of granular and detonation-resistant)				
IT	<b>497-19-8</b> , Carbonic acid disodium salt, uses and miscellaneous <b>1330-43-4</b> , Sodium tetraborate <b>7558-79-4</b> , Dibasic sodium phosphate <b>11138-47-9</b> , Sodium perborate RL: USES (Uses) (peroxycarboxylic acid bleach prepn in presence of, for detonation resistance)				
IT	<b>66280-55-5</b> , Diperoxydodecanedioic acid RL: USES (Uses) (bleaching agents, manufacture of granular and detonation-resistant)				
RN	<b>66280-55-5</b> HCAPLUS				
CN	Dodecanediperoxoic acid (9CI) (CA INDEX NAME)				

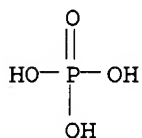


IT 497-19-8, Carbonic acid disodium salt, uses and miscellaneous  
 7558-79-4, Dibasic sodium phosphate  
 RL: USES (Uses)  
 (peroxycarboxylic acid bleach prepn in presence of, for detonation resistance)  
 RN 497-19-8 HCAPLUS  
 CN Carbonic acid disodium salt (8CI, 9CI) (CA INDEX NAME)



●2 Na

RN 7558-79-4 HCAPLUS  
 CN Phosphoric acid, disodium salt (8CI, 9CI) (CA INDEX NAME)



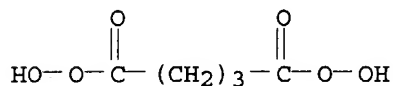
●2 Na

L83 ANSWER 6 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1990:403217 HCAPLUS  
 DN 113:3217  
 ED Entered STN: 06 Jul 1990  
 TI **Stable** aqueous aromatic percarboxylic acid solution  
 IN Beilfuss, Wolfgang; Diehl, Karl Heinz  
 PA Sterling Drug Inc., USA  
 SO U.S., 5 pp.  
 CODEN: USXXAM  
 DT **Patent**  
 LA English  
 IC ICM C07C179-133  
 ICS D06L003-02; A01N037-10; A01N043-40  
 NCL 252186230  
 CC 10-5 (Microbial Biochemistry)  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4917815	A	19900417	US 1988-205133	19880610 <--
	CA 1319581	A1	19930629	CA 1988-569394	19880614 <--
PRAI	US 1988-205133		19880610	<--	
OS	CASREACT 113:3217				
AB	An aqueous <b>disinfectant</b> and bleaching agent is claimed comprising an				

aromatic percarboxylic acid which has been **stabilized** with the corresponding aromatic carboxylic acid and H<sub>2</sub>O<sub>2</sub> or a solution of perglutamic acid **stabilized** with H<sub>2</sub>O<sub>2</sub>. Thus, a **stabilized** aromatic percarboxylic acid solution was prepared by mixing 0.2 parts by weight benzoic anhydride with 0.2 parts 2,6-pyridinecarboxylic acid with 99.6 parts of 35% H<sub>2</sub>O<sub>2</sub>. The solution (now containing perbenzoic acid and benzoic acid) was active against Staphylococcus aureus, Pseudomonas aeruginosa, and other common bacterial strains in vitro.

ST **disinfectant** arom percarboxylic acid; bleaching agent arom percarboxylic acid  
 IT **Bactericides, Disinfectants, and Antiseptics**  
 Bleaching agents  
 (aromatic percarboxylic acids)  
 IT Carboxylic acids, biological studies  
 RL: BIOL (Biological study)  
 (aryl, peroxy, **disinfectant** and bleaching agent)  
 IT 93-59-4, Perbenzoic acid 499-83-2, 2,6-Pyridinedicarboxylic acid  
**28317-46-6, Perglutaric acid**  
 RL: BIOL (Biological study)  
 (**disinfectant** containing)  
 IT 7722-84-1, Hydrogen peroxide, biological studies  
 RL: BIOL (Biological study)  
 (**disinfectant** containing aromatic percarboxylic acids and)  
 IT 93-97-0, Benzoic anhydride 108-55-4, Glutaric anhydride  
 RL: BIOL (Biological study)  
 (**disinfectant** containing hydrogen peroxide and)  
 IT **28317-46-6, Perglutaric acid**  
 RL: BIOL (Biological study)  
 (**disinfectant** containing)  
 RN 28317-46-6 HCAPLUS  
 CN Pentanediperoxoic acid (9CI) (CA INDEX NAME)



L83 ANSWER 7 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1989:520661 HCAPLUS  
 DN 111:120661  
 ED Entered STN: 01 Oct 1989  
 TI Anaerobe-selective antibacterial compositions containing  
 1,12-dodecanedioic peroxy acids  
 IN Sampathkumar, Padmini  
 PA Procter and Gamble Co., USA  
 SO U.S., 7 pp.  
 CODEN: USXXAM  
 DT **Patent**  
 LA English  
 IC ICM A61K007-20  
 NCL 424053000  
 CC 62-7 (Essential Oils and Cosmetics)  
 Section cross-reference(s): 63  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4804530	A	19890214	US 1987-75235	19870717 <--
	US 5028414	A	19910702	US 1988-272669	19881117 <--
PRAI	US 1987-75235		19870717	<--	

AB Substituted or unsubstituted 1,12-dodecanedioic peroxyacids, and pharmaceutically acceptable salts, or esters are useful for treating or



preventing anaerobic bacterial infections such as acne, and especially diseases of the oral cavity such as gingivitis and periodontal diseases. A mouth rinse contained diperoxy 1,12-dodecanedioic acid 0.1, boric acid 0.133, Na saccharin 0.102, Na<sub>2</sub>B<sub>4</sub>O<sub>7</sub>·10H<sub>2</sub>O 0.680, 1N HCl 1.2, EtOH 15% by weight, and water balance. The composition had an available O concentration of 120 ppm and was used twice daily within 10 min of mixing the component to treat or prevent gingivitis or periodontal diseases.

ST peroxy dodecanedioate bactericide gingivitis; acne peroxy dodecanedioate bactericide; mouthwash peroxy dodecanedioate bactericide

IT Acne  
(treatment of, dodecanedioic peroxyacid-containing body rinses for)

IT Dentifrices  
(anticariogenic, dodecanedioic peroxyacids in)

IT Mouthwashes  
(bactericidal, dodecanedioic peroxyacids in)

IT Periodontium  
(disease, treatment of, dodecanedioic peroxyacid-containing dentifrices for)

IT Gingiva  
(disease, gingivitis, treatment of, dodecanedioic peroxyacid-containing dentifrices for)

IT **Bactericides, Disinfectants, and Antiseptics**  
(medical, dodecanedioic peroxyacids as, dentifrices containing)

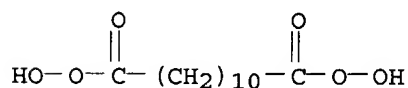
IT 53384-55-7D, salts and esters  
RL: BIOL (Biological study)  
(dentifrices containing as anaerobe-selective antibacterial agent, for treatment of periodontal diseases)

IT 53384-55-7 **66280-55-5**, Dodecanediperoxoic acid  
**66280-55-5D**, Dodecanediperoxoic acid, salts and esters  
RL: BIOL (Biological study)  
(dentifrices containing, as antibacterial agent, for treatment of periodontal diseases)

IT **66280-55-5**, Dodecanediperoxoic acid **66280-55-5D**,  
Dodecanediperoxoic acid, salts and esters  
RL: BIOL (Biological study)  
(dentifrices containing, as antibacterial agent, for treatment of periodontal diseases)

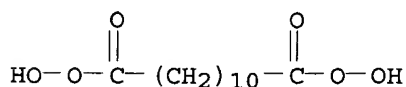
RN 66280-55-5 HCAPLUS

CN Dodecanediperoxoic acid (9CI) (CA INDEX NAME)



RN 66280-55-5 HCAPLUS

CN Dodecanediperoxoic acid (9CI) (CA INDEX NAME)



L83 ANSWER 8 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1982:494461 HCAPLUS

DN 97:94461

ED Entered STN: 12 May 1984

TI Bleach composition

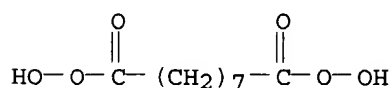
IN Clements, Anthony H.

PA Lever Brothers Co., USA  
 SO U.S., 5 pp. Cont.-in-part of U.S. Ser. No. 176,750, abandoned.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 IC C11D009-42  
 NCL 252096000  
 CC 46-5 (Surface Active Agents and Detergents)  
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4337164	A	19820629	US 1981-237793	19810224 <--
PRAI	GB 1979-28590		19790816 <--		
	US 1980-176750		19800811 <--		
AB	An organic per acid such as diperisophthalic acid (I) [1786-87-4] or peracetic acid [79-21-0] is used with a water-soluble bromide salt for the bleaching of soiled fabrics at $\leq 40^\circ$ without causing dye transfer. Thus, water containing 0.4% powdered detergent, 0.355 + $10^{-3}$ mol/L I, and 0.71 + $10^{-3}$ mol/L NaBr was used at $40^\circ$ for the bleaching-laundrying of tea-stained fabrics.				
ST	peroxy acid bromide bleaching; carboxylic acid peroxy bleaching; sodium bromide peroxide bleaching				
IT	Bleaching agents (peroxy acid-sodium bromide, for low temperature use, for fabrics)				
IT	Peroxides, uses and miscellaneous RL: USES (Uses) (organic, bleaching by sodium bromide and, of fabrics at low temperature)				
IT	Carboxylic acids, uses and miscellaneous RL: USES (Uses) (peroxy, bleaching by sodium bromide and, of fabrics at low temperature)				
IT	7647-15-6, properties RL: PRP (Properties) (bleaching by peroxy acids and, of fabrics at low temperature)				
IT	79-21-0 1786-87-4 1941-79-3 2311-91-3 RL: USES (Uses) (bleaching by sodium bromide and, of fabrics at low temperature)				
IT	7647-15-6, properties RL: PRP (Properties) (bleaching by peroxy acids and, of fabrics at low temperature)				
RN	7647-15-6 HCAPLUS				
CN	Sodium bromide (NaBr) (9CI) (CA INDEX NAME)				

Br—Na

IT 1941-79-3  
 RL: USES (Uses)  
 (bleaching by sodium bromide and, of fabrics at low temperature)  
 RN 1941-79-3 HCAPLUS  
 CN Nonanediperoxoic acid (9CI) (CA INDEX NAME)



L83 ANSWER 9 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1977:156984 HCAPLUS  
 DN 86:156984  
 ED Entered STN: 12 May 1984

TI Bleach **tablet** composition  
 IN Huber, Arthur Elmer  
 PA Procter and Gamble Co., USA  
 SO U.S., 5 pp.  
 CODEN: USXXAM  
 DT **Patent**  
 LA English  
 IC C01B013-00  
 NCL 252186000  
 CC 39-9 (Textiles)  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4013581	A	19770322	US 1975-594910	19750710 <--
PRAI	US 1975-594910		19750710 <--		

AB Mixts. of microfine, free-flowing starch [9005-25-8] and **microcryst.** cellulose (I) [9004-34-6] can be combined with solid **diperazelaic acid** (II) [1941-79-3] bleaches or perlauric acid [2388-12-7] bleaches and **Na2SO4** to provide **tablets** which are storage-**stable**, durable, and yet rapidly disintegrate and disperse on contact with water. Thus, a 1:1 II-**Na2SO4** mixture was blended with Avicel **microcryst.** I, starch, and Mg stearate, and the composition was formed into a 2.25 in. diameter

bleach **tablet**. The **tablet** rapidly disintegrated and dispersed in an automatic washing machine.

ST storage **stability** peroxygen bleach; starch peroxygen bleaching **tablet**; cellulose peroxygen bleaching **tablet**; **diperazelaic acid** textile bleach

IT Bleaching agents  
 (peroxygen, storage-**stable tablets** containing, disintegrating agent for)

IT **1941-79-3** 2388-12-7  
 RL: USES (Uses)  
 (bleaching agents, storage-**stable tablets** containing, disintegrating agents for)

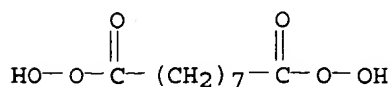
IT 9005-25-8, uses and miscellaneous  
 RL: USES (Uses)  
 (disintegrating agents, containing **microcryst.** cellulose, for storage-**stable** peroxygen bleaching **tablets**)

IT 9004-34-6, uses and miscellaneous  
 RL: USES (Uses)  
 (**microcryst.**, disintegrating agents, containing starch, for storage-**stable** peroxygen bleaching **tablets**)

IT **7757-82-6**, uses and miscellaneous  
 RL: USES (Uses)  
 (peroxygen bleaching **tablets** containing, storage-**stable**, disintegrating agents for)

IT **1941-79-3**  
 RL: USES (Uses)  
 (bleaching agents, storage-**stable tablets** containing, disintegrating agents for)

RN 1941-79-3 HCAPLUS  
 CN Nonanediperoxoic acid (9CI) (CA INDEX NAME)

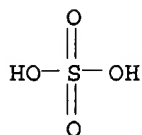


IT **7757-82-6**, uses and miscellaneous  
 RL: USES (Uses)

(peroxygen bleaching tablets containing, storage-stable  
, disintegrating agents for)

RN 7757-82-6 HCAPLUS

CN Sulfuric acid disodium salt (8CI, 9CI) (CA INDEX NAME)



●2 Na

L83 ANSWER 10 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1958:56072 HCAPLUS

DN 52:56072

OREF 52:10152c-f

ED Entered STN: 22 Apr 2001

TI Organic peracids

IN Krimm, Heinrich

PA Farbenfabriken Bayer A.-G.

DT Patent

LA Unavailable

CC 10 (Organic Chemistry)

FAN.CNT 1

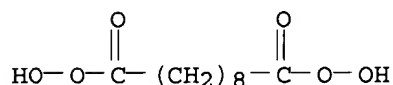
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2813896		19571119	US	<--

AB Peracids are prepared from carboxylic acids in good yield by 30% aqueous H2O2 (I) and concentrated H2SO4 sufficient to give a 1:1.5-3 H2SO4-H2O ratio. I (460 g.) added dropwise with ice-cooling to 700 g. concentrated H2SO4, 240 g. glacial HOAc added, and the mixture kept overnight and distilled in vacuo from a glass apparatus yields 280 g. 82% MeCO3H (II), b15 22-8°; raising the bath temperature from 50-90° yields 160 g. 34% II, total yield 91%. Similar yields of II are obtained using 204 g. Ac2O (instead of HOAc). Similarly, the mixture obtained from 230 g. I, 750 g. concentrated H2SO4, and 190 g. ClCH2CO3H is extracted with 800 g. CH2Cl2 to give an 11.8% solution of ClCH2CO3H, yield 80%. C3H7CO2H gives a 90% yield of 75% C3H7CO3H, b12 26-9°. The products of reaction of 576 g. C7H15CO2H with 460 g. I and 1500 g. concentrated H2SO4 are taken up in petr. ether, dried over Na2SO4, and freed of solvent, leaving 600 g. 71% C7H15CO3H, yield 66%. Reaction of 230 g. I and 500 g. concentrated H2SO4 with 73 g. (CH2)4(CO2H)2 gives 80% crystalline (CH2)4(CO3H)2, filtered from the chilled mixture, m. 114-15° (decomposition) (Et2O or tetrahydrofuran). Similarly, 100 g. (CH2)8(CO2H)2 gives a nearly quant. yield of (CH2)8(CO3H)2, m. 96-7°. Addition of 122 g. BzOH and enough Et2O to give a homogenous mixture to 230 g. I and 500 g. concentrated H2SO4, keeping the mixture 2 days at room temperature, adding an equal volume of ice-H2O, and extracting the aqueous phase with 500 ml. Et2O give a solution of 44 g. (32%) BzO2H in Et2O.

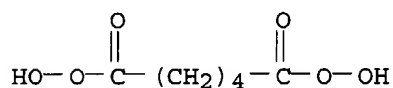
IT Peroxy acids  
(manufacture of)

IT 93-59-4, Peroxybenzoic acid 13122-71-9, Peroxybutyric acid  
123292-90-0, Peroxyacetic acid, 3α-hydroxy-11-oxo-5β-pregnan-20-

ylidene ester, acetate  
(manufacture of)  
IT 816-42-2, Peroxyacetic acid, chloro- 5796-85-0,  
**Peroxysebacic acid 5824-51-1,**  
**Peroxyadipic acid** 33734-57-5, Peroxyoctanoic acid  
(preparation of)  
IT 5796-85-0, **Peroxysebacic acid**  
**5824-51-1, Peroxyadipic acid**  
(preparation of)  
RN 5796-85-0 HCAPLUS  
CN Decanediperoxoic acid (9CI) (CA INDEX NAME)



RN 5824-51-1 HCAPLUS  
CN Hexanediperoxoic acid (9CI) (CA INDEX NAME)



=> d l85 all hitstr tot

L85 ANSWER 1 OF 53 HCAPLUS COPYRIGHT 2004 ACS on STN  
AN 2003:429246 HCAPLUS  
DN 138:390861  
ED Entered STN: 05 Jun 2003  
TI Preparation of composite **disinfectant**  
IN Guo, Ying; Zhang, Tiande; Zhang, Yi  
PA Peop. Rep. China  
SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 4 pp.  
CODEN: CNXXEV  
DT **Patent**  
LA Chinese  
IC ICM A01N037-04  
CC 63-5 (Pharmaceuticals)  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CN 1350785	A	20020529	CN 2000-129840	20001030 <--
PRAI	CN 2000-129840		20001030 <--		

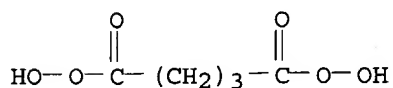
AB The title **disinfectant** is composed of chlorine dioxide and **peroxyglutaric acid**. The **disinfectant** is highly effective, wide-spectrum, and low in toxicity.  
ST **disinfectant** chlorine dioxide **peroxyglutaric acid** prepn

IT Antibacterial agents  
**Disinfectants**

(preparation of composite **disinfectant**)  
IT 10049-04-4, Chlorine dioxide 28317-46-6, **Peroxyglutaric acid**

RL: PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process);  
USES (Uses)  
(preparation of composite **disinfectant**)

IT 28317-46-6, **Peroxyglutaric acid**  
 RL: PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)  
 (preparation of composite **disinfectant**)  
 RN 28317-46-6 HCAPLUS  
 CN Pentanediperoxoic acid (9CI) (CA INDEX NAME)

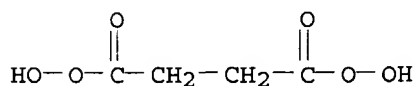


L85 ANSWER 2 OF 53 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 2002:664090 HCAPLUS  
 DN 137:175031  
 ED Entered STN: 04 Sep 2002  
 TI **Disinfecting** composition containing peroxyalkanedicarboxylates  
 IN Zhang, Tiande; Guo, Ying; Zhang, Yi  
 PA Peop. Rep. China  
 SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 6 pp.  
 CODEN: CNXXEV  
 DT **Patent**  
 LA Chinese  
 IC ICM A01N037-00  
 CC 63-8 (Pharmaceuticals)  
 FAN.CNT 1

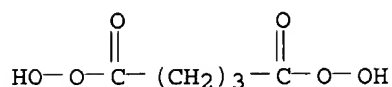
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CN 1320371	A	20011107	CN 2000-106205	20000425 <--
PRAI	CN 2000-106205		20000425 <--		

AB A **disinfecting** composition is composed of peroxypropane-1,3-dicarboxylic acid 0-99, peroxyethane-1,2-dicarboxylic acid 0-99, H<sub>3</sub>PO<sub>4</sub> or urea as **stabilizing** agent 0.2-0.3, ethanol or nonionics as synergist 0.2-70, and addnl. water to 100%. The composition is prepared by mixing, and treating with ionizing radiation. The product is highly effective, and wide-spectrum.

ST **disinfectant** dicarboxylic acid peroxyalkane  
 IT **Disinfectants**  
 (disinfecting composition containing peroxyalkanedicarboxylates)  
 IT 2279-96-1, Butanediperoxoic acid 28317-46-6,  
**Pentanediperoxoic acid**  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (disinfecting composition containing peroxyalkanedicarboxylates)  
 IT 2279-96-1, Butanediperoxoic acid 28317-46-6,  
**Pentanediperoxoic acid**  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (disinfecting composition containing peroxyalkanedicarboxylates)  
 RN 2279-96-1 HCAPLUS  
 CN Butanediperoxoic acid (9CI) (CA INDEX NAME)



RN 28317-46-6 HCAPLUS  
 CN Pentanediperoxoic acid (9CI) (CA INDEX NAME)



L85 ANSWER 3 OF 53 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:123162 HCAPLUS

DN 136:169474

ED Entered STN: 15 Feb 2002

TI Pasty peracids

IN Shamayeli, Khalil; Merz, Thomas

PA Henkel Ecolab G.m.b.H. & Co., o.H.G., Germany

SO PCT Int. Appl., 29 pp.

CODEN: PIXXD2

DT **Patent**

LA German

IC ICM C11D017-00

ICS C11D017-04; B65D077-22; C11D003-39; C11D011-00

CC 46-6 (Surface Active Agents and Detergents)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002012431	A1	20020214	WO 2001-EP9027	20010804 <--
	W: AU, BR, CA, JP, PL, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
	DE 10039031	A1	20020228	DE 2000-10039031	20000810 <--
	AU 2001082068	A5	20020218	AU 2001-82068	20010804 <--
PRAI	DE 2000-10039031	A	20000810	<--	
	WO 2001-EP9027	W	20010804		
OS	MARPAT 136:169474				
AB	Active O-containing pastes, useful as bleaches, washing agents and <b>disinfectants</b> , contain (a) H2O2 and/or ≥1 H2O-soluble percarboxylic acids or their anions, (b) ≥1 viscosity-enhancing components, e.g., polyvinylpyrrolidone, fatty acids, amine oxides, phosphonate esters, fatty alcs. or phthalamidopercarboxylic acid (PAP), with the proviso that (a) is different from PAP, (c) H2O and, optionally, further adjuvants and active agents. For example, a paste containing H2O2 24, phthalimidoperhexanoic acid 40, caprylic acid 8, a phosphate ester (unspecified) 5, phosphonate <b>stabilizer</b> (unspecified) 3, acrylate-maleate copolymer (Sokalan) 5 and ethoxylated (15 EO) tallow alcs. 10% had Brookfield viscosity (25°) 80,000.				
ST	peracid paste manuf viscosity enhancement; hydrogen peroxide paste manuf viscosity enhancement; phthalimidoperhexanoic acid paste manuf viscosity enhancement; polyvinylpyrrolidone viscosity enhancer hydrogen peroxide paste manuf; fatty acid viscosity enhancer peracid paste manuf				
IT	Peroxy acids				
	RL: TEM (Technical or engineered material use); USES (Uses) (active oxygen-containing pastes with increased viscosity)				
IT	Bleaching agents				
	<b>Disinfectants</b> (active oxygen-containing pastes with increased viscosity for use as)				
IT	Alcohols, uses				
	RL: NUU (Other use, unclassified); USES (Uses) (fatty, viscosity enhancers; active oxygen-containing pastes with increased viscosity)				
IT	Amine oxides				
	Fatty acids, uses				
	RL: NUU (Other use, unclassified); USES (Uses) (viscosity enhancers; active oxygen-containing pastes with increased viscosity)				
IT	Detergents				

(washing agents; active oxygen-containing pastes with increased viscosity for use as)

IT 124-07-2, Caprylic acid, uses 7722-84-1, Hydrogen peroxide, uses 9003-39-8, Polyvinylpyrrolidone 128275-31-0, Phthalimidoperhexanoic acid 398143-67-4  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (active oxygen-containing pastes with increased viscosity)

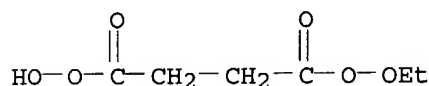
IT 7664-38-2D, Phosphoric acid, esters  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (acyclic; active oxygen-containing pastes with increased viscosity)

IT 15477-76-6D, Phosphonate, esters  
 RL: NUU (Other use, unclassified); USES (Uses)  
 (viscosity enhancers; active oxygen-containing pastes with increased viscosity)

RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 RE  
 (1) Chazard, G; US 4801395 A 1989 HCAPLUS  
 (2) Colgate Palmolive Co; WO 0023555 A 2000 HCAPLUS  
 (3) Ellis, E; US 5962392 A 1999 HCAPLUS  
 (4) Franz-Josef, C; US 4610799 A 1986 HCAPLUS  
 (5) Henkel Ecolab & Co Ogh; DE 19739333 A 1999  
 (6) Henkel Kgaa; DE 19750455 C 1999 HCAPLUS  
 (7) Interlox Chemicals Ltd; GB 2255507 A 1992 HCAPLUS  
 (8) Josa, J; US 5716924 A 1998 HCAPLUS  
 (9) Ledon, H; US 5616335 A 1997 HCAPLUS  
 (10) Theis, P; WO 9509770 A 1995  
 (11) Unilever Nv; EP 0442549 A 1991 HCAPLUS

IT 398143-67-4  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (active oxygen-containing pastes with increased viscosity)

RN 398143-67-4 HCAPLUS  
 CN Butanediperoxoic acid, monoethyl ester (9CI) (CA INDEX NAME)



L85 ANSWER 4 OF 53 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 2001:713075 HCAPLUS  
 DN 135:253251  
 ED Entered STN: 28 Sep 2001  
 TI Antimicrobial compositions containing hydrogen peroxide and peroxydicarboxylic acids  
 IN Hilgren, John D.; Richter, Francis L.; Reinhart, Duane J.; Salverda, Joy A.  
 PA Ecolab Inc., USA  
 SO PCT Int. Appl., 74 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 IC ICM A01N059-00  
 ICS A01N037-16; A01N037-16; A01N059-00; A01N037-36; A01N037-06; A01N037-04; A01N037-02; A01N033-12  
 CC 5-2 (Agrochemical Bioregulators)  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001070030	A2	20010927	WO 2001-US7396	20010307 <--
	WO 2001070030	A3	20020131		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,



CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,  
 HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,  
 LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,  
 SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU,  
 ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,  
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,  
 BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG  
 US 6627657 B1 20030930 US 2000-532691 20000322 <--  
 EP 1265486 A2 20021218 EP 2001-913350 20010307 <--  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

PRAI US 2000-532691 A 20000322 <--  
 WO 2001-US7396 W 20010307

OS MARPAT 135:253251

AB Compns. having antimicrobial activity against a variety of microorganisms, including vegetative bacteria, bacterial spores, fungi, and fungal spores are particularly useful for microbiocidal treatments of a variety of substances. More specifically, compns. have antimicrobial activity against microorganisms of the *Bacillus cereus* group such as *Bacillus cereus*, *Bacillus mycoides*, *Bacillus anthracis*, and *Bacillus thuringiensis* are particularly useful. Compns. including hydrogen peroxide, a carboxylic acid  $R(COOH)_n$  ( $R = H$ , alkyl, alkenyl, alicyclic group, aryl, heteroaryl, heterocyclic group;  $n = 1, 2, 3$ ), and a peroxy-carboxylic acid  $R(COOOH)_n$  ( $R = H$ , alkyl, alkenyl, alicyclic group, aryl, heteroaryl, heterocyclic group;  $n = 1, 2, 3$ ), in which the weight ratio of the peroxy-carboxylic acid to the hydrogen peroxide is at least 4:1 are effective against microorganisms, particularly bacterial spores. Such compns. include a reduced amount of hydrogen peroxide relative to the amount of peroxy-carboxylic acid as compared to conventional compns. Compns. can also include a quaternary ammonium compound, a **stabilizing agent**, a surfactant, a hydrotrope, or other additives. Methods of using a composition including hydrogen peroxide, a carboxylic acid, and a peroxy-carboxylic acid in which the ratio of the peroxy-carboxylic acid to the hydrogen peroxide is at least 4:1 are useful for reducing the microbial nos. on a variety of substances contaminated by microorganisms, particularly of the *Bacillus cereus* group. Such substances include foodstuffs, water, general-premise surfaces, specific-equipment surfaces, animal carcasses, soil, and textiles.

ST antimicrobial hydrogen peroxide peroxy-carboxylic acid *Bacillus*

IT Antibacterial agents

Antimicrobial agents

#### Disinfectants

(antimicrobial compns. containing hydrogen peroxide and peroxy-carboxylic acids)

IT Carboxylic acids, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(antimicrobial compns. containing hydrogen peroxide and peroxy-carboxylic acids)

IT *Bacillus anthracis*

*Bacillus cereus*

*Bacillus mycoides*

*Bacillus thuringiensis*

(antimicrobial compns. containing hydrogen peroxide and peroxy-carboxylic acids against)

IT Spore

(bacterial; antimicrobial compns. containing hydrogen peroxide and peroxy-carboxylic acids against)

IT Carboxylic acids, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(peroxy; antimicrobial compns. containing hydrogen peroxide and

peroxycarboxylic acids)

IT 79-21-0, Peroxyacetic acid 107-32-4, Peroxyformic acid 676-08-4, Peroxyundecanoic acid 818-85-9, Peroxyheptanoic acid 2279-96-1, Peroxysuccinic acid 2388-12-7, Peroxydodecanoic acid 3058-35-3, Peroxynonanoic acid 4212-43-5, Peroxypropanoic acid 5703-64-0, 7722-84-1, hydrogen peroxide,, biological studies 13122-71-9, Peroxybutyric acid 14156-10-6, Peroxydecanoic acid 21860-08-2, Peroxyglycolic acid 28317-46-6, **Peroxyglutaric acid** 28384-48-7, Peroxypentanoic acid 33734-57-5, Peroxyoctanoic acid 127542-88-5

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(antimicrobial compns. containing hydrogen peroxide and peroxycarboxylic acids)

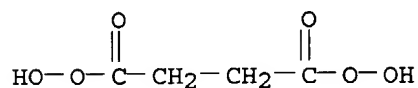
IT 2279-96-1, Peroxysuccinic acid 28317-46-6, **Peroxyglutaric acid**

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(antimicrobial compns. containing hydrogen peroxide and peroxycarboxylic acids)

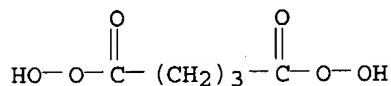
RN 2279-96-1 HCAPLUS

CN Butanediperoxoic acid (9CI) (CA INDEX NAME)



RN 28317-46-6 HCAPLUS

CN Pentanediperoxoic acid (9CI) (CA INDEX NAME)



L85 ANSWER 5 OF 53 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2001:545466 HCAPLUS

DN 135:127208

ED Entered STN: 27 Jul 2001

TI Control of microbial populations in the gastrointestinal tract of animals

IN McKenzie, K. Scott; **Giletto, Anthony; Hitchens, G. Duncan**; Hargis, Billy M.; Herron, Kelly L.

PA **Lynntech, Inc., USA**

SO PCT Int. Appl., 33 pp.

CODEN: PIXXD2

DT **Patent**

LA English

IC ICM A61K031-00

ICS A01N037-16; A01N059-00

CC 63-6 (Pharmaceuticals)

Section cross-reference(s): 18

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001052827	A1	20010726	WO 2000-US8316	20000329 <--
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA,				

UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
 RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,  
 DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,  
 CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 6342528 B1 20020129 US 2000-487966 20000118 <--  
 EP 1248601 A1 20021016 EP 2000-919803 20000329 <--  
 EP 1248601 B1 20030910

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MK, CY, AL

AT 249210 E 20030915 AT 2000-919803 20000329 <--  
 US 2002115719 A1 20020822 US 2001-981669 20011017 <--  
 US 6518307 B2 20030211

PRAI US 2000-487966 A 20000118 <--  
 WO 2000-US8316 W 20000329 <--

OS MARPAT 135:127208

AB Biocides for ingestion by live animals contain an aqueous solution of a peracid compound or a mixture of an organic acid and an inorg. peroxide and methods for controlling microbial contamination in the gastrointestinal tract of live animals. Peroxy compds. such as peracetic acid, perlactic acid, or percitric acid were added to drinking water for broiler chickens and the biocidal activity evaluated.

ST peracid drinking water animal antimicrobial

IT Antimicrobial agents  
 Campylobacter  
 Digestive tract  
 Drinking waters  
 Escherichia coli  
 Helicobacter  
 Listeria  
 Poultry  
 Salmonella  
 (control of microbial populations in the gastrointestinal tract of animals)

IT Peroxy acids  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (control of microbial populations in the gastrointestinal tract of animals)

IT Drug delivery systems  
 (oral; control of microbial populations in the gastrointestinal tract of animals)

IT Carboxylic acids, biological studies  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (peroxy; control of microbial populations in the gastrointestinal tract of animals)

IT 75-91-2, tert-Butyl hydroperoxide 79-21-0, Peracetic acid 93-59-4D, Perbenzoic acid, derivs. 94-36-0, Benzoyl peroxide, biological studies 107-32-4, Performic acid 123-23-9, Succinyl peroxide 818-85-9, Heptaneperoxoic acid 2388-12-7, Perlauroic acid 3058-35-3, Pernonanoic acid 3851-97-6, Monoperglutaric acid 4212-43-5, Perpropionic acid 13122-71-9, Perbutyric acid 21860-08-2, Perglycolic acid 28317-46-6, Diperglutaric acid 33734-57-5, Peroctanoic acid 75033-25-9, Perlactic acid 115900-27-1, Magnesium peroxyphthalate 127542-88-5  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (control of microbial populations in the gastrointestinal tract of animals)

IT 50-21-5, Lactic acid, biological studies 64-19-7, Acetic acid, biological studies 77-92-9, Citric acid, biological studies 7664-93-9, Sulfuric acid, biological studies 7722-84-1, Hydrogen peroxide, biological studies  
 RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL

(Biological study); USES (Uses)  
(control of microbial populations in the gastrointestinal tract of animals)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Aquaclear International Limited; WO 9108981 A 1991 HCAPLUS

(2) Interlox Chemicals Limited; EP 0233731 A 1987 HCAPLUS

(3) Jean-Paul, H; US 4726948 A 1988 HCAPLUS

(4) Semper, A; WO 9726908 A 1997 HCAPLUS

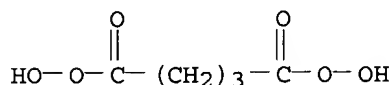
IT 28317-46-6, **Diperglutaric acid**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(control of microbial populations in the gastrointestinal tract of animals)

RN 28317-46-6 HCAPLUS

CN Pentanediperoxoic acid (9CI) (CA INDEX NAME)



L85 ANSWER 6 OF 53 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2001:489267 HCAPLUS

DN 135:82069

ED Entered STN: 06 Jul 2001

TI Methods and agents for cleaning and **disinfecting** fragile medical appliances

IN Biering, Holger; Glasmacher, Rudolf; Schwidden, Hubert; Sorns, Joerg

PA Henkel Ecolab G.m.b.H. + Co. o.H.G., Germany

SO PCT Int. Appl., 32 pp.

CODEN: PIXXD2

DT **Patent**

LA German

IC ICM A61L002-00

CC 63-8 (Pharmaceuticals)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001047565	A2	20010705	WO 2000-EP12693	20001214 <--
	WO 2001047565	A3	20030320		
	W: AU, BR, CA, CN, HU, PL, SG, TR, US, ZA				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
	DE 19962344	A1	20010712	DE 1999-19962344	19991223 <--
	EP 1313515	A2	20030528	EP 2000-991186	20001214 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
	US 2003139311	A1	20030724	US 2002-168738	20021002 <--
PRAI	DE 1999-19962344	A	19991223	<--	
	WO 2000-EP12693	W	20001214	<--	

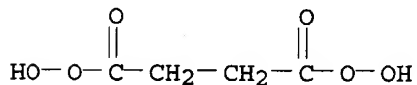
OS MARPAT 135:82069

AB The invention relates to the use of agents, which contain at least one **disinfection** system based on selected organic peracids and combinations of peracids, in automatically functioning systems, in which fragile medical appliances, in particular, endoscopes, are cleaned and **disinfected**. According to the invention, the appliances are brought into contact with an aqueous **disinfection** agent solution after they have been treated and/or at the same time they are being treated with an aqueous cleaning solution. The invention also relates to cleaning and

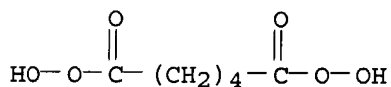
- disinfection** agents and methods which are all suited for carrying out this purpose.
- ST peracid **disinfection** medical instrument endoscope
- IT Medical equipment  
(instruments; methods and agents for cleaning and **disinfecting** fragile medical appliances)
- IT **Disinfectants**  
Endoscopes  
**Sterilization and Disinfection**  
Surfactants  
Temperature effects, biological  
pH  
(methods and agents for cleaning and **disinfecting** fragile medical appliances)
- IT Phosphates, biological studies  
RL: MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)  
(methods and agents for cleaning and **disinfecting** fragile medical appliances)
- IT Fatty acids, biological studies  
RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)  
(methods and agents for cleaning and **disinfecting** fragile medical appliances)
- IT Carboxylic acids, reactions  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(methods and agents for cleaning and **disinfecting** fragile medical appliances)
- IT Carboxylic acids, biological studies  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)  
(peroxy; methods and agents for cleaning and **disinfecting** fragile medical appliances)
- IT Siloxanes (nonpolymeric)  
RL: MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)  
(surfactants; methods and agents for cleaning and **disinfecting** fragile medical appliances)
- IT 79-21-0, peracetic acid 2279-96-1, Persuccinic acid 4212-43-5, Perpropionic acid 5824-51-1, **Peradipic acid** 21860-08-2, Perglycolic acid 28317-46-6, **Perglutaric acid** 33734-57-5, Peroctanoic acid 128275-31-0, Phthalimidoperhexanoic acid 347400-05-9 347400-06-0 347400-07-1 347839-46-7 347839-47-8  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)  
(methods and agents for cleaning and **disinfecting** fragile medical appliances)
- IT 7722-84-1, Hydrogen peroxide, formation (nonpreparative)  
RL: FMU (Formation, unclassified); FORM (Formation, nonpreparative)  
(methods and agents for cleaning and **disinfecting** fragile medical appliances)
- IT 2279-96-1, Persuccinic acid 5824-51-1, **Peradipic acid** 28317-46-6, **Perglutaric acid** 347400-05-9 347400-06-0 347400-07-1  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)  
(methods and agents for cleaning and **disinfecting** fragile

medical appliances)

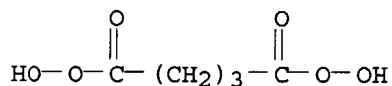
RN 2279-96-1 HCAPLUS  
 CN Butanediperoxoic acid (9CI) (CA INDEX NAME)



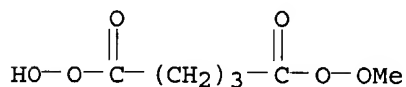
RN 5824-51-1 HCAPLUS  
 CN Hexanediperoxoic acid (9CI) (CA INDEX NAME)



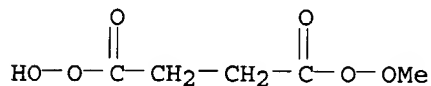
RN 28317-46-6 HCAPLUS  
 CN Pentanediperoxoic acid (9CI) (CA INDEX NAME)



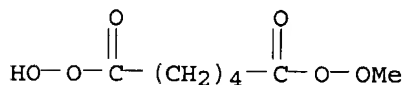
RN 347400-05-9 HCAPLUS  
 CN Pentanediperoxoic acid, monomethyl ester (9CI) (CA INDEX NAME)



RN 347400-06-0 HCAPLUS  
 CN Butanediperoxoic acid, monomethyl ester (9CI) (CA INDEX NAME)



RN 347400-07-1 HCAPLUS  
 CN Hexanediperoxoic acid, monomethyl ester (9CI) (CA INDEX NAME)



L85 ANSWER 7 OF 53 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 2001:489181 HCAPLUS  
 DN 135:82067  
 ED Entered STN: 06 Jul 2001  
 TI Peroxy acids esters with excellent surface adhesion for surface  
**disinfection** and cleaning.  
 IN Bragulla, Siegfried; Laufenberg, Alfred; Kluschanzoff, Harald

PA Henkel Ecolab G.m.b.H. + Co. o.H.G., Germany  
 SO PCT Int. Appl., 22 pp.  
 CODEN: PIXXD2

DT **Patent**

LA German

IC ICM A01N037-16

ICS A01N025-30; C11D003-48; A01N037-16; A01N059-00; A01N037-16;  
 A01N037-04; A01N037-02

CC 63-8 (Pharmaceuticals)

Section cross-reference(s): 5

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001047359	A2	20010705	WO 2000-EP12689	20001214 <--
	WO 2001047359	A3	20020516		
	W: US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
	DE 19962342	A1	20010712	DE 1999-19962342	19991223 <--
	EP 1239730	A2	20020918	EP 2000-990742	20001214 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
	US 2003133956	A1	20030717	US 2002-168612	20020624 <--
	US 6683040	B2	20040127		
	US 2003220216	A1	20031127	US 2003-462454	20030616 <--
PRAI	DE 1999-19962342	A	19991223 <--		
	WO 2000-EP12689	W	20001214 <--		
	US 2002-168612	A3	20020624		
OS	MARPAT 135:82067				
AB	The invention relates to the use of peroxy acid esters for improving surface adhesion during the <b>disinfection</b> of surfaces and to synergistic antimicrobial combinations of peroxy acid esters and addnl. constituents, such as the corresponding alcs. and the free peroxy acids.				
ST	peroxy acid ester surface <b>disinfectant</b> cleanser				
IT	Peroxy acids				
	RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)				
	(esters; surface <b>disinfection</b> and cleaning agents containing)				
IT	Peroxides, biological studies				
	RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)				
	(fatty alkyl, carboxy; surface <b>disinfection</b> and cleaning agents containing peroxy acids esters and)				
IT	Fatty acids, biological studies				
	RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)				
	(peroxy; surface <b>disinfection</b> and cleaning agents containing peroxy acids esters and)				
IT	<b>Disinfectants</b>				
	Scouring agents				
	(surface <b>disinfection</b> and cleaning agents containing peroxy acids esters and)				
IT	347400-05-9 347400-06-0 347400-07-1				
	RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)				
	(surface <b>disinfection</b> and cleaning agents containing)				
IT	67-56-1, Methanol, biological studies 79-21-0, Peracetic acid				
	2279-96-1, Persuccinic acid 4212-43-5, Perpropionic acid				
	5824-51-1D, Peradipic acid, 1				
	28317-46-6, Perglutaric acid 128275-31-0				
	RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)				
	(surface <b>disinfection</b> and cleaning agents containing peroxy acids				

esters and)

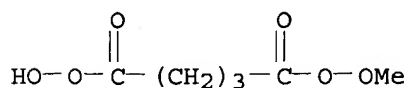
IT 347400-05-9 347400-06-0 347400-07-1

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(surface **disinfection** and cleaning agents containing)

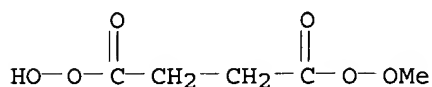
RN 347400-05-9 HCAPLUS

CN Pentanediperoxoic acid, monomethyl ester (9CI) (CA INDEX NAME)



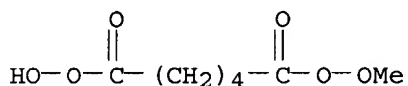
RN 347400-06-0 HCAPLUS

CN Butanediperoxoic acid, monomethyl ester (9CI) (CA INDEX NAME)



RN 347400-07-1 HCAPLUS

CN Hexanediperoxoic acid, monomethyl ester (9CI) (CA INDEX NAME)



IT 2279-96-1, Persuccinic acid 5824-51-1D,

Peradipic acid, 1 28317-46-6,

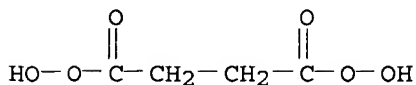
Perglutaric acid

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(surface **disinfection** and cleaning agents containing peroxy acids esters and)

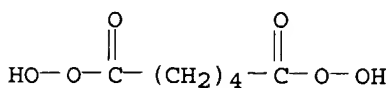
RN 2279-96-1 HCAPLUS

CN Butanediperoxoic acid (9CI) (CA INDEX NAME)



RN 5824-51-1 HCAPLUS

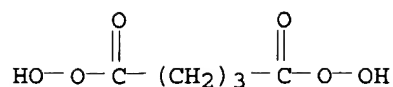
CN Hexanediperoxoic acid (9CI) (CA INDEX NAME)



RN 28317-46-6 HCAPLUS

CN Pentanediperoxoic acid (9CI) (CA INDEX NAME)





L85 ANSWER 8 OF 53 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2001:488498 HCAPLUS

DN 135:78599

ED Entered STN: 06 Jul 2001

TI Peracid-containing **disinfecting** laundry composition for delicate fabrics and its application

IN Koerber, Heinz-otto; Merz, Thomas; Roth, Christian; Meyer, Bernhard

PA Henkel-Ecolab G.m.b.H. & Co Ohg, Germany

SO Ger. Offen., 10 pp.

CODEN: GWXXBX

DT **Patent**

LA German

IC ICM D06L003-02

ICS D06L001-22

CC 46-5 (Surface Active Agents and Detergents)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 19962343	A1	20010705	DE 1999-19962343	19991223 <--
	WO 2001048136	A1	20010705	WO 2000-EP12695	20001214 <--
	W: CA, PL, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
	EP 1240300	A1	20020918	EP 2000-983318	20001214 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
	US 2003045443	A1	20030306	US 2002-168426	20020621 <--
	US 6693069	B2	20040217		
PRAI	DE 1999-19962343	A	19991223	<--	
	WO 2000-EP12695	W	20001214	<--	

OS MARPAT 135:78599

AB **Disinfecting** compns. for washing of delicate textiles comprise a combination of peracid and at least one fatty acid and/or at least one hydrotrope and or at least one surfactant and/or at least one complex-forming component. An example comprised 10% **perglutaric acid** monomethyl ester solution 80, alkylbenzenesulfonate 10, and water 10 weight%; application to wool showed effectiveness on *S. aureus* and *E. coli* without excessive adverse effects on the phys. properties of the fabric.

ST peracid **disinfectant** laundering delicate fabric

IT Surfactants

(amphoteric; in peracid-containing **disinfecting** laundry compns. for delicate fabrics)

IT Surfactants

(anionic; in peracid-containing **disinfecting** laundry compns. for delicate fabrics)

IT Surfactants

(cationic; in peracid-containing **disinfecting** laundry compns. for delicate fabrics)

IT Amine oxides

RL: TEM (Technical or engineered material use); USES (Uses)  
(cocoalkyldimethyl; in peracid-containing **disinfecting** laundry compns. for delicate fabrics)

IT **Disinfectants**

(detergent; peracid-containing **disinfecting** laundry compns. for delicate fabrics)

IT Detergents  
(disinfectant; peracid-containing disinfecting laundry compns. for delicate fabrics)

IT Hydrotropes  
(in peracid-containing disinfecting laundry compns. for delicate fabrics)

IT Protein hydrolyzates  
RL: PEP (Physical, engineering or chemical process); PROC (Process)  
(in peracid-containing disinfecting laundry compns. for delicate fabrics)

IT Amine oxides  
RL: TEM (Technical or engineered material use); USES (Uses)  
(in peracid-containing disinfecting laundry compns. for delicate fabrics)

IT Fatty acids, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(in peracid-containing disinfecting laundry compns. for delicate fabrics)

IT Detergents  
(laundry; peracid-containing disinfecting laundry compns. for delicate fabrics)

IT Surfactants  
(nonionic; in peracid-containing disinfecting laundry compns. for delicate fabrics)

IT Acetate fibers, processes  
Acrylic fibers, processes  
Polyamide fibers, processes  
Rayon, processes  
RL: PEP (Physical, engineering or chemical process); PROC (Process)  
(peracid-containing disinfecting laundry compns. for delicate fabrics)

IT Carboxylic acids, uses  
RL: BUU (Biological use, unclassified); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses)  
(peroxy; peracid-containing disinfecting laundry compns. for delicate fabrics)

IT Rayon, processes  
RL: PEP (Physical, engineering or chemical process); PROC (Process)  
(reconstituted; peracid-containing disinfecting laundry compns. for delicate fabrics)

IT Textiles  
(silk; peracid-containing disinfecting laundry compns. for delicate fabrics)

IT Textiles  
(wool; peracid-containing disinfecting laundry compns. for delicate fabrics)

IT 7722-84-1, Hydrogen peroxide, uses  
RL: BUU (Biological use, unclassified); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses)  
(in peracid-containing disinfecting laundry compns. for delicate fabrics)

IT 98-11-3D, Benzenesulfonic acid, alkyl derivs., salts, uses 124-07-2, Octanoic acid, uses 3944-72-7D, 1-Octanesulfonic acid, salts 5324-84-5, Sodium 1-octanesulfonate 7440-21-3D, Silicon, compds., uses 7664-38-2D, Phosphoric acid, esters, uses 25155-19-5D, Naphthalenesulfonic acid, salts 25321-41-9D, Xylenesulfonic acid, salts  
RL: TEM (Technical or engineered material use); USES (Uses)  
(in peracid-containing disinfecting laundry compns. for delicate fabrics)

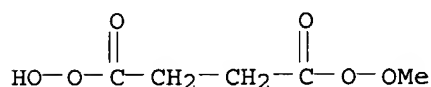
IT 347400-06-0  
RL: BUU (Biological use, unclassified); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses)  
(monomethyl ester; peracid-containing disinfecting laundry

compns. for delicate fabrics)

IT 79-21-0, Peracetic acid **2279-96-1**, Butanediperoxoic acid  
 4212-43-5, Perpropionic acid **5824-51-1**, **Hexanediperoxoic**  
**acid 28317-46-6**, **Pentanediperoxoic**  
**acid** 33734-57-5, Peroctanoic acid 128275-31-0  
**347400-05-9 347400-07-1 347839-46-7**  
 RL: BUU (Biological use, unclassified); TEM (Technical or engineered  
 material use); BIOL (Biological study); USES (Uses)  
 (peracid-containing **disinfecting** laundry compns. for delicate  
 fabrics)

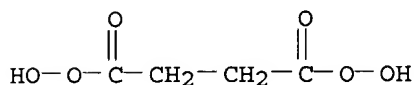
IT **347400-06-0**  
 RL: BUU (Biological use, unclassified); TEM (Technical or engineered  
 material use); BIOL (Biological study); USES (Uses)  
 (monomethyl ester; peracid-containing **disinfecting** laundry  
 compns. for delicate fabrics)

RN 347400-06-0 HCAPLUS  
 CN Butanediperoxoic acid, monomethyl ester (9CI) (CA INDEX NAME)

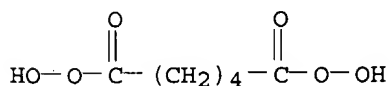


IT **2279-96-1**, Butanediperoxoic acid **5824-51-1**,  
**Hexanediperoxoic acid 28317-46-6**,  
**Pentanediperoxoic acid 347400-05-9**  
**347400-07-1**  
 RL: BUU (Biological use, unclassified); TEM (Technical or engineered  
 material use); BIOL (Biological study); USES (Uses)  
 (peracid-containing **disinfecting** laundry compns. for delicate  
 fabrics)

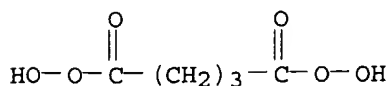
RN 2279-96-1 HCAPLUS  
 CN Butanediperoxoic acid (9CI) (CA INDEX NAME)



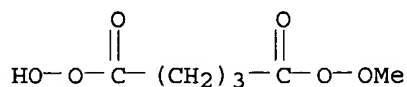
RN 5824-51-1 HCAPLUS  
 CN Hexanediperoxoic acid (9CI) (CA INDEX NAME)



RN 28317-46-6 HCAPLUS  
 CN Pentanediperoxoic acid (9CI) (CA INDEX NAME)

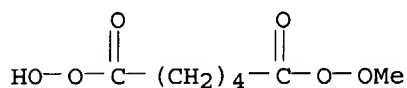


RN 347400-05-9 HCAPLUS  
 CN Pentanediperoxoic acid, monomethyl ester (9CI) (CA INDEX NAME)



RN 347400-07-1 HCAPLUS

CN Hexanediperoxoic acid, monomethyl ester (9CI) (CA INDEX NAME)



L85 ANSWER 9 OF 53 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2000:351405 HCAPLUS

DN 133:3966

ED Entered STN: 26 May 2000

TI Beverage manufacture and cold aseptic bottling using peroxyacid antimicrobial composition

IN Richter, Francis L.; Cords, Bruce R.; Besse, Michael E.; Nogami, Kenji

PA Ecolab Inc., USA

SO PCT Int. Appl., 57 pp.

CODEN: PIXXD2

DT **Patent**

LA English

IC ICM A61L002-18

ICS B65B055-10

CC 17-4 (Food and Feed Chemistry)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000029038	A1	20000525	WO 1999-US24422	19991018 <--
	W: AU, BR, CA, CN, JP, KR, MX, ZA				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	US 6326032	B1	20011204	US 1998-195750	19981118 <--
	AU 9965205	A1	20000605	AU 1999-65205	19991018 <--
	AU 760679	B2	20030522		
	BR 9915324	A	20010807	BR 1999-15324	19991018 <--
	EP 1133320	A1	20010919	EP 1999-953230	19991018 <--
	EP 1133320	B1	20031203		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	JP 2002529113	T2	20020910	JP 2000-582083	19991018 <--
	TW 431895	B	20010501	TW 1999-88120049	19991210 <--
PRAI	US 1998-195750	A	19981118 <--		
	WO 1999-US24422	W	19991018 <--		

AB A peroxyacid antimicrobial comprises a C1-4 peroxycarboxylic acid or a C1-4 peroxycarboxylic acid combined with a C6-18 peroxy acid in beverage processing. The combination of these materials produces a synergistic effect, providing a much more potent biocide than can be obtained by using these components sep. Other components can be added to the composition such as hydrotrope coupling agents, **stabilizers**, etc. An effective antimicrobial solution is formed at low concns. when the concentrate composition is

diluted with water to a pH in the range of about 2-8. Thus, the peroxycarboxylic acid may comprise peroxyacetic or peroxyglycolic acids; the peroxy acids may include peroxyoctanoic acid, peroxydecanoic acid, etc. The composition may be used to sanitize fixed, "in-place" processing lines in dairies, breweries, and other food and beverage processing operations. A further use is in processes including aseptic cold filling

of beverage containers such as cans, glass bottles or 2-L PET bottles.

ST beverage bottling antimicrobial peroxy acid

IT Peroxy acids  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
 (C6-18; beverage manufacture and cold aseptic bottling using peroxyacid antimicrobial composition)

IT Fatty acids, biological studies  
 RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
 (C8-10; beverage manufacture and cold aseptic bottling using peroxyacid antimicrobial composition)

IT Antimicrobial agents  
 Arthrinium  
 Arthrinium sacchari  
 Bottles  
 Canning  
 Chaetomium  
 Chaetomium bostrychodes  
**Cleaning**  
 Escherichia coli  
 Fungicides  
 Hydrotropes  
 Staphylococcus aureus  
 (beverage manufacture and cold aseptic bottling using peroxyacid antimicrobial composition)

IT Tea products  
 (beverages; beverage manufacture and cold aseptic bottling using peroxyacid antimicrobial composition)

IT Beverages  
 (carbonated; beverage manufacture and cold aseptic bottling using peroxyacid antimicrobial composition)

IT Beverages  
 (fruit drinks; beverage manufacture and cold aseptic bottling using peroxyacid antimicrobial composition)

IT Carboxylic acids, biological studies  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
 (peroxy, C1-4; beverage manufacture and cold aseptic bottling using peroxyacid antimicrobial composition)

IT Beverages  
 (plant; beverage manufacture and cold aseptic bottling using peroxyacid antimicrobial composition)

IT 79-21-0, Peroxyacetic acid 5106-46-7, Peroxyhexanoic acid  
**5796-85-0, Diperoxysebacic acid**  
**5824-51-1, Diperoxyadipic acid** 7722-84-1,  
 Hydrogen peroxide, biological studies 14156-10-6, Peroxydecanoic acid  
 21860-08-2, Peroxyglycolic acid 33734-57-5, Peroxyoctanoic acid  
 77155-29-4 93691-93-1  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
 (beverage manufacture and cold aseptic bottling using peroxyacid antimicrobial composition)

IT 270904-17-1, NAS 8D  
 RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
 (beverage manufacture and cold aseptic bottling using peroxyacid antimicrobial composition)

IT 2809-21-4, Dequest 2010  
 RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
 (chelating agent; beverage manufacture and cold aseptic bottling using peroxyacid antimicrobial composition)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Ecolab Incorporated; WO 9201669 A1 1992 HCAPLUS
- (2) Henkel KGAA; DE 4443177 A1 1996 HCAPLUS
- (3) Interlox Chemicals Limited; GB 2257630 A 1993 HCAPLUS

IT 5796-85-0, Diperoxysebacic acid

5824-51-1, Diperoxyadipic acid

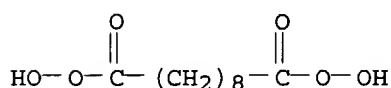
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); FFD (Food or feed use); BIOL (Biological study);

USES (Uses)

(beverage manufacture and cold aseptic bottling using peroxyacid antimicrobial composition)

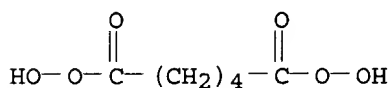
RN 5796-85-0 HCAPLUS

CN Decanediperoxy acid (9CI) (CA INDEX NAME)



RN 5824-51-1 HCAPLUS

CN Hexanediperoxy acid (9CI) (CA INDEX NAME)



L85 ANSWER 10 OF 53 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2000:140634 HCAPLUS

DN 132:179839

ED Entered STN: 01 Mar 2000

TI **Sterilization** of meat products and antimicrobial compositions

IN Gutzmann, Timothy A.; Anderson, Brian J.; Reed, Pamela J.; Cords, Bruce R.; Grab, Lawrence A.; Richardson, Edward H.

PA Ecolab Inc., USA

SO Jpn. Kokai Tokkyo Koho, 65 pp.

CODEN: JKXXAF

DT **Patent**

LA Japanese

IC ICM A23B004-12

ICS A23B004-14

CC 17-4 (Food and Feed Chemistry)

FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000060418	A2	20000229	JP 1999-231086	19990818 <--
	US 6010729	A	20000104	US 1998-137242	19980820 <--
	US 6113963	A	20000905	US 1999-368452	19990820 <--
PRAI	US 1998-137242	A	19980820	<--	
	US 1999-368452	A	19990820	<--	

AB Microbial population in meat products is reduced by treating the products with an antimicrobial composition comprising (i) an effective antimicrobial amount comprising  $\geq 2$  ppm of  $\geq 1$  C $\leq 12$  mono- or diperoxydicarboxylic acids and (ii) an effective antimicrobial amount comprising  $\geq 20$  ppm of  $\geq 1$  C $\leq 18$  dicarboxylic acids.

Treatment of prerigor beef samples with a combination of (a) steam, (b) a composition containing H<sub>2</sub>O, peroxyacetic acid-peroxyoctanoic acid mixture,

H<sub>2</sub>O<sub>2</sub>,

AcOH, octanoic acid, hydroxyethylidene-1,1-diphosphonic acid, and Na

octane-mixed mono- and (d) **sterile** water rinse reduced average CFU at log10 reduction 2.55.

ST meat product **sterilization** peroxydicarboxylic acid lactate

IT **Carboxylic acids**, biological studies

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); FFD (Food or feed use); BIOL (Biological study); USES (Uses)

(C1-18; **sterilization** of meat products with antimicrobial compns. containing mono- or **diperoxycarboxylic** acids and carboxylic acids)

IT Meat

(beef; **sterilization** of meat products with antimicrobial compns. containing mono- or diperoxycarboxylic acids and carboxylic acids)

IT Meat

(chicken; **sterilization** of meat products with antimicrobial compns. containing mono- or diperoxycarboxylic acids and carboxylic acids)

IT Meat

(game hen; **sterilization** of meat products with antimicrobial compns. containing mono- or diperoxycarboxylic acids and carboxylic acids)

IT **Carboxylic acids**, biological studies

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); FFD (Food or feed use); BIOL (Biological study); USES (Uses)

(hydroxy, C3-6; **sterilization** of meat products with antimicrobial compns. containing mono- or **diperoxycarboxylic** acids and carboxylic acids)

IT Meat

(lamb; **sterilization** of meat products with antimicrobial compns. containing mono- or diperoxycarboxylic acids and carboxylic acids)

IT Buffalo

Buffalo

Pheasant

Struthio camelus

(meat; **sterilization** of meat products with antimicrobial compns. containing mono- or diperoxycarboxylic acids and carboxylic acids)

IT Solvents

(organic; **sterilization** of meat products with antimicrobial compns. containing mono- or diperoxycarboxylic acids and carboxylic acids)

IT **Carboxylic acids**, biological studies

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); FFD (Food or feed use); BIOL (Biological study); USES (Uses)

(peroxy, C≤12; **sterilization** of meat products with antimicrobial compns. containing mono- or **diperoxycarboxylic** acids and carboxylic acids)

IT Meat

(pork; **sterilization** of meat products with antimicrobial compns. containing mono- or diperoxycarboxylic acids and carboxylic acids)

IT Antibacterial agents

Antimicrobial agents

Crab

Escherichia coli

Gelation agents

Hydrotropes

Lobster

Mussel

Octopus (molluscan common name)

Pathogen

Scallop

Sequestering agents

Shrimp

Squid

**Sterilization and Disinfection**

## Thickening agents

(**sterilization** of meat products with antimicrobial compns. containing mono- or diperoxydicarboxylic acids and carboxylic acids)

- IT Meat (turkey; **sterilization** of meat products with antimicrobial compns. containing mono- or diperoxydicarboxylic acids and carboxylic acids)
- IT Meat (veal; **sterilization** of meat products with antimicrobial compns. containing mono- or diperoxydicarboxylic acids and carboxylic acids)
- IT Meat Meat (water buffalo; **sterilization** of meat products with antimicrobial compns. containing mono- or diperoxydicarboxylic acids and carboxylic acids)
- IT 2809-21-4, 1-Hydroxyethylidene-1,1-diphosphonic acid  
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(sequestering agent; **sterilization** of meat products with antimicrobial compns. containing mono- or diperoxydicarboxylic acids and carboxylic acids)
- IT 50-21-5, Lactic acid, biological studies 64-19-7, Acetic acid, biological studies 79-21-0, Peroxyacetic acid 124-07-2, Octanoic acid, biological studies 7722-84-1, Hydrogen peroxide, biological studies 14156-10-6, Peroxydecanoic acid 33734-57-5, Peroxyoctanoic acid  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(**sterilization** of meat products with antimicrobial compns. containing mono- or diperoxydicarboxylic acids and carboxylic acids)

L85 ANSWER 11 OF 53 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1999:808289 HCAPLUS

DN 132:85125

ED Entered STN: 23 Dec 1999

TI Corrosion resistance of medical steels in peroxidate-based **disinfecting** solutions

AU Roi, I. D.; Sevidova, E. K.; Blazheevskii, N. E.; Levitin, E. Ya.

CS Ukrainian Pharmaceutical Academy, Kharkov, 310002, Ukraine

SO Protection of Metals (Translation of Zashchita Metallov) (1999), 35(6), 589-591

CODEN: PTNMAR; ISSN: 0033-1732

PB MAIK Nauka/Interperiodica Publishing

DT Journal

LA English

CC 72-6 (Electrochemistry)

Section cross-reference(s): 55, 63

AB The results of electrochem. and gravimetric studies of the corrosion resistance of medical steels of the 12Kh18N10T and 4Kh13 types in **disinfecting** solns. containing carboxylic acid peroxides are set forth. Solns. based on **diperoxyadipic acid** (Nebis) and water-tert-butanol mixture of monoperoxydicarboxylic acids (C7-C9) (Peronix) were characterized by a lower corrosivity than those based on formic and acetic acids.

ST corrosion resistance medical steel peroxidate based **disinfecting** soln

IT Peroxy acids

RL: NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process); USES (Uses)

(C7-9; corrosion resistance of medical steels in **disinfecting** solns. containing a mixture of C7-C9 monoperoxydicarboxylic acids in tert-Butanol/H2O (Peronix))

IT **Disinfectants**

(corrosion resistance of medical steels in solns. containing)

IT Tools



- (medical; corrosion resistance of medical steels in peroxidate-based **disinfecting** solns.)
- IT Corrosion  
Electrolytic polarization  
(of medical steels in **disinfecting** solns.)
- IT 7722-84-1, Hydrogen peroxide, uses  
RL: NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process); USES (Uses)  
(corrosion resistance of medical steels in **disinfecting** solns. containing)
- IT 59593-05-4, Desoxon  
RL: NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process); USES (Uses)  
(corrosion resistance of medical steels in **disinfecting** solns. containing Desoxon)
- IT 79-21-0, Desoxon 1  
RL: NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process); USES (Uses)  
(corrosion resistance of medical steels in **disinfecting** solns. containing Desoxon-1)
- IT 254106-20-2, Nebis  
RL: NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process); USES (Uses)  
(corrosion resistance of medical steels in **disinfecting** solns. containing Nebis)
- IT 60918-61-8, Pervomur  
RL: NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process); USES (Uses)  
(corrosion resistance of medical steels in **disinfecting** solns. containing Pervomur)
- IT 75-65-0, tert-Butyl alcohol, uses 254106-25-7, Peronix  
RL: NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process); USES (Uses)  
(corrosion resistance of medical steels in **disinfecting** solns. containing aqueous tert-Bu alc. and Peronix)
- IT 12597-69-2, Steel, properties 39412-98-1, 4Kh13 50947-31-4, 12Kh18N10T  
RL: PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process)  
(corrosion resistance of medical steels in peroxidate-based **disinfecting** solns.)

RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD  
RE

- (1) Anon; OST (Branch Standard) 251-005-87 1988
- (2) Anon; OST (Branch Standard) 42-21-2-85 1985
- (3) Blazheevskii, N; UA 95020605 1995
- (4) Blazheevskii, N; Promislova vlasnost 1995, 1, P3.11
- (5) Chekhina, T; Zashch Met 1987, V23(2), P275
- (6) Freiman, L; Potentiostatic Methods in the Study of Corrosion and Electrochemical Protection 1972
- (7) Freiman, L; Potentsiostaticheskie metody v korrozionnykh issledovaniyakh i elektrokhimicheskoi zashchite 1972
- (8) Kazhdan, V; Instruction for the Application of Pervomur in the Sterilization of Surgical Tools Suture Materials and Surgeon's Gloves 1972
- (9) Kazhdan, V; Instruktsiya po primeneniyu Pervomura dlya sterilizatsii khirurgicheskikh instrumentov shovnogo materiala i khirurgicheskikh perchatok 1972
- (10) Khachatryan, E; Zashch Met 1978, V14(3), P326 HCAPLUS
- (11) Kuznetsov, S; Zashch Met 1975, V11(6), P726
- (12) Marshakov, A; Zashch Met 1994, V30(3), P238 HCAPLUS
- (13) Mikhailovskii, Y; Zashch Met 1986, V22(5), P692 HCAPLUS
- (14) Molodov, A; Elektrokhiimiya 1982, V18(8), P1068 HCAPLUS

AN 1999:113923 HCAPLUS  
 DN 130:172756  
 ED Entered STN: 19 Feb 1999  
 TI Agent for oxidative treatment of human hair  
 IN Till, Lothar; Guenther, Dirk; Goebe, Matthias  
 PA Germany  
 SO Ger. Offen., 4 pp.  
 CODEN: GWXXBX  
 DT Patent  
 LA German  
 IC ICM A61K007-135  
 CC 62-3 (Essential Oils and Cosmetics)  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 19733841	A1	19990211	DE 1997-19733841	19970805 <--
PRAI	DE 1997-19733841		19970805 <--		

AB Peroxy derivs. of carboxylic acids are **stable** sources of active (nascent) O in dry compns. for bleaching, lightening, blonding, and decolorizing the hair. These compds. show good dermatol. properties, water solubility, and biodegradability. Release of active O from the compds. is regulated by constituents in the composition which regulate the alkalinity, so as

th prevent the decrease in O release rate which otherwise occurs in the 2nd half of the treatment time. These constituents comprise pH regulators, pH buffers, and catalysts. Thus, an 8% aqueous solution of Mg monoperphthalate bleached hair approx. as rapidly as 8% aqueous H2O2 solution, but did so more uniformly, and oxidative damage to the hair was more isotropic than with H2O2. A suitable bleaching composition contained Mg monoperphthalate 30, calcined Na2CO3 10, NaH2PO4 10, ferrous gluconate 0.05, and excipients to 100 weight% in **powdered** or granular form.

ST hair bleach peroxy acid; org peroxy acid hair bleach  
 IT Buffers  
 Catalysts  
 Grains (particles)  
 (agent for oxidative treatment of human hair)

IT Carbonates, biological studies  
 Per compounds  
 Phosphates, biological studies  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
 (agent for oxidative treatment of human hair)

IT Reactive oxygen species  
 RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (agent for oxidative treatment of human hair)

IT Carboxylic acids, biological studies  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
 (aromatic, peroxy; agent for oxidative treatment of human hair)

IT Hair preparations  
 (bleaches; agent for oxidative treatment of human hair)

IT Carboxylic acids, biological studies  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
 (dicarboxylic, peroxy; agent for oxidative treatment of human hair)

IT Carboxylic acids, biological studies  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
 (peroxy; agent for oxidative treatment of human hair)

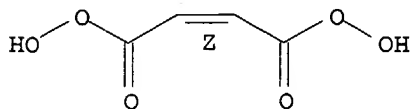
IT Cosmetics  
 (powders; agent for oxidative treatment of human hair)

IT pH

$$\begin{array}{c} \text{O} \\ || \\ \text{HO}-\text{C}-\text{OH} \end{array}$$

●<sub>2</sub> Na

Double bond geometry as shown.



```
L85 ANSWER 13 OF 53 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1999:26332 HCAPLUS
DN 130:53987
ED Entered STN: 14 Jan 1999
TI Peracid-based composition for cleaning, disinfection, and
decontamination of surfaces contaminated by toxic agents
IN Leuthy, Michel
PA Quadrimex S. A., Fr.
SO Fr. Demande, 18 pp.
CODEN: FRXXBL
DT Patent
LA French
IC ICM C11D003-39
ICS C11D001-835
CC 46-6 (Surface Active Agents and Detergents)
FAN.CNT 1
```

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	FR 2761080	A1	19980925	FR 1997-3479	19970321 <--
	FR 2761080	B1	20020719		
PRAI	FR 1997-3479		19970321	<--	
OS	MARPAT 130:53987				
AB	Title compns., which are effective against toxic organophosphorus and organosulfur compds., contain organic peracids, quaternary ammonium surfactants, and nonionic surfactants.				
ST	<b>disinfectant</b> detergent peracid surface; nonionic surfactant <b>disinfectant</b> detergent surface; quaternary ammonium surfactant <b>disinfectant</b> detergent surface				
IT	Phenols, uses RL: TEM (Technical or engineered material use); USES (Uses) (alkyl; peracid-based composition for cleaning, <b>disinfection</b> , and decontamination of surfaces contaminated by toxic agents)				
IT	<b>Disinfectants</b> <b>Disinfectants</b> (detergent; peracid-based composition for cleaning, <b>disinfection</b> , and decontamination of surfaces contaminated by toxic agents)				
IT	Detergents Detergents ( <b>disinfectant</b> ; peracid-based composition for cleaning, <b>disinfection</b> , and decontamination of surfaces contaminated by toxic agents)				
IT	Fatty acids, uses Polyoxyalkylenes, uses RL: TEM (Technical or engineered material use); USES (Uses) (esters; peracid-based composition for cleaning, <b>disinfection</b> , and decontamination of surfaces contaminated by toxic agents)				
IT	Fatty acids, uses RL: TEM (Technical or engineered material use); USES (Uses) (ethoxylated; peracid-based composition for cleaning, <b>disinfection</b> , and decontamination of surfaces contaminated by toxic agents)				
IT	Surfactants (nonionic; peracid-based composition for cleaning, <b>disinfection</b> , and decontamination of surfaces contaminated by toxic agents)				
IT	Polyoxyalkylenes, uses Quaternary ammonium compounds, uses Thiols (organic), uses RL: TEM (Technical or engineered material use); USES (Uses) (peracid-based composition for cleaning, <b>disinfection</b> , and decontamination of surfaces contaminated by toxic agents)				
IT	Carboxylic acids, uses RL: TEM (Technical or engineered material use); USES (Uses) (peroxy, organic; peracid-based composition for cleaning, <b>disinfection</b> , and decontamination of surfaces contaminated by toxic agents)				
IT	57-09-0, Cetyltrimethylammonium bromide 79-21-0, Peracetic acid 112-02-7, Cetyltrimethylammonium chloride 122-18-9, Benzylcetyldimethylammonium chloride 2388-12-7, Perdodecanoic acid 3529-04-2, Cetylbenzyldimethylammonium bromide 4212-43-5, Perpropionic acid 5880-39-7 14156-10-6, Perdecanoic acid <b>15630-89-4</b> , Sodium percarbonate 19816-73-0, Pertetradecanoic acid 24625-03-4, Cetyldimethyl-2-hydroxyethylammonium chloride 25322-68-3, Polyethylene glycol 36411-33-3 62634-16-6, Cetyl-1,4-diazabicyclo[2.2.2]octylammonium bromide <b>66280-55-5</b> , Dodecanediperoxoic acid 78948-87-5, Magnesium monoperoxyphthalate RL: TEM (Technical or engineered material use); USES (Uses) (peracid-based composition for cleaning, <b>disinfection</b> , and decontamination of surfaces contaminated by toxic agents)				
IT	<b>15630-89-4</b> , Sodium percarbonate <b>66280-55-5</b> , Dodecanediperoxoic acid RL: TEM (Technical or engineered material use); USES (Uses)				

(peracid-based composition for cleaning, **disinfection**, and decontamination of surfaces contaminated by toxic agents)

RN 15630-89-4 HCAPLUS  
CN Carbonic acid disodium salt, compd. with hydrogen peroxide (H2O2) (2:3)  
(9CI) (CA INDEX NAME)

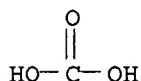
CM 1

CRN 7722-84-1  
CMF H2 O2

HO-OH

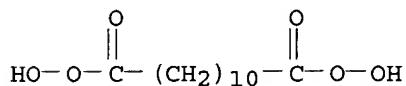
CM 2

CRN 497-19-8  
CMF C H2 O3 . 2 Na



●2 Na

RN 66280-55-5 HCAPLUS  
CN Dodecanediperoxoic acid (9CI) (CA INDEX NAME)



L85 ANSWER 14 OF 53 HCAPLUS COPYRIGHT 2004 ACS on STN  
AN 1998:105975 HCAPLUS  
DN 128:155842  
ED Entered STN: 21 Feb 1998  
TI Forming a peracids and compositions containing the same, useful in laundry and general cleaning and **disinfection**  
IN Bianchetti, Giulia Ottavia; Campestrini, Sandro; Di Furia, Fulvio; Scialla, Stefano  
PA Procter and Gamble Company, USA  
SO PCT Int. Appl., 38 pp.  
CODEN: PIXXD2  
DT **Patent**  
LA English  
IC ICM C11D  
CC 46-5 (Surface Active Agents and Detergents)  
FAN.CNT 8

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9804659	A2	19980205	WO 1997-US12824	19970722 <--
	WO 9804659	A3	19980514		

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ,

LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NZ, PL, PT,  
 RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, UA, UG, US, UZ,  
 VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
 RW: GH, KE, LS, MW, SD, SZ, UG, ZW, BF, BJ, CF, CG, CI, CM, GA, GN,  
 ML, MR, NE, SN, TD, TG

EP 822183 A2 19980204 EP 1996-202168 19960731 <--  
 EP 822183 A3 19980729

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI

AU 9738084 A1 19980220 AU 1997-38084 19970722 <--  
 CN 1231599 A 19991013 CN 1997-198352 19970722 <--  
 JP 11514040 T2 19991130 JP 1997-508934 19970722 <--  
 US 5968885 A 19991019 US 1997-981372 19971218 <--

PRAI EP 1996-202168 A 19960731 <--  
 EP 1996-870054 A 19960422 <--  
 WO 1996-US10906 W 19960626 <--  
 WO 1997-US12824 W 19970722 <--

OS MARPAT 128:155842

AB The title process comprises reacting in an aqueous medium an alpha mono alkylated carboxylic acid and/or an alpha mono alkoxyated carboxylic acid with hydrogen peroxide or a water-soluble source thereof. The title compns. comprise an alpha mono alkylated percarboxylic acid and/or alpha mono alkoxyated percarboxylic acid; or an alpha mono alkylated carboxylic acid and/or alpha mono alkoxyated carboxylic acid and hydrogen peroxide or a water-soluble source thereof. A composition comprised Dobanol 91-10 1.2,

Dobanol

91-2.5 4.8, hydrogen peroxide 7, 2-methylperglutaric acid 1.8, citric acid 6, sulfuric acid 1.9, perfume 0.5, and water to 100%.

ST peracid compn laundry cleaning **disinfection**; carboxylic acid peracid compn

IT Alcohols, reactions

RL: RCT (Reactant); RACT (Reactant or reagent)  
 (C9-11, ethoxylated, Dobanol 91-10; forming a peracids and compns. containing the same, useful in laundry and general cleaning and **disinfection**)

IT Carboxylic acids, reactions

RL: RCT (Reactant); RACT (Reactant or reagent)  
 (dicarboxylic; forming a peracids and compns. containing the same, useful in laundry and general cleaning and **disinfection**)

IT Detergents

**Disinfectants**

(forming a peracids and compns. containing the same, useful in laundry and general cleaning and **disinfection**)

IT Detergents

(laundry; forming a peracids and compns. containing the same, useful in laundry and general cleaning and **disinfection**)

IT Carboxylic acids, uses

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (peroxy; forming a peracids and compns. containing the same, useful in laundry and general cleaning and **disinfection**)

IT 202478-88-4P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (forming a peracids and compns. containing the same, useful in laundry and general cleaning and **disinfection**)

IT 79-31-2, 2-Methylpropionic acid 116-53-0 498-21-5, 2-Methylsuccinic acid 617-26-5, 2-Ethylglutaric acid 617-62-9, 2-Methylglutaric acid 626-70-0, 2-Methyladipic acid 1726-80-3, 2-Methoxysuccinic acid 2121-67-7, 2,4-Dimethylglutaric acid 2874-74-0, 2-Methylauric acid 2874-75-1, 2-Ethyllauric acid 3004-93-1, 2-Methyloctanoic acid 4536-23-6, 2-Methylhexanoic acid 7722-84-1, Hydrogen peroxide, reactions 13545-04-5, 2,3-Dimethylsuccinic acid 52017-57-9, 2-Methylpimelic acid 66018-23-3, 2-Methoxyoctanoic acid 86797-93-5 101452-98-6

202478-89-5 202478-90-8

RL: RCT (Reactant); RACT (Reactant or reagent)

(forming a peracids and compns. containing the same, useful in laundry and general cleaning and **disinfection**)

IT 77-92-9, Citric acid, uses 5615-78-1, 2-Methylpersuccinic acid

5695-92-1, 2-Methylperglutaric acid

RL: TEM (Technical or engineered material use); USES (Uses)

(forming a peracids and compns. containing the same, useful in laundry and general cleaning and **disinfection**)

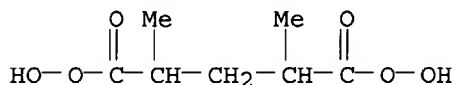
IT 202478-88-4P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(forming a peracids and compns. containing the same, useful in laundry and general cleaning and **disinfection**)

RN 202478-88-4 HCAPLUS

CN Pentanediperoxoic acid, 2,4-dimethyl- (9CI) (CA INDEX NAME)



L85 ANSWER 15 OF 53 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1997:384253 HCAPLUS

DN 127:6370

ED Entered STN: 20 Jun 1997

TI Bleaching or washing composition for a fabric or dishes

IN Reinehr, Dieter; Metzger, Georges

PA CIBA Ltd., Switz.; Reinehr, Dieter; Metzger, Georges

SO PCT Int. Appl., 35 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM C11D003-39

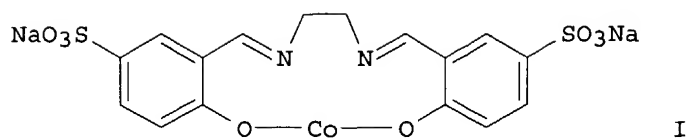
ICS C07F015-06; C07C251-24; C07C215-50; C07C215-76

CC 46-6 (Surface Active Agents and Detergents)

Section cross-reference(s): 29

FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9714779	A1	19970424	WO 1996-EP4353	19961007 <--
W: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, HU, IL, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TR, TT, UA, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9672872	A1	19970507	AU 1996-72872	19961007 <--
EP 876464	A1	19981111	EP 1996-934567	19961007 <--
R: BE, CH, DE, FR, GB, IT, LI, NL				
JP 11515049	T2	19991221	JP 1996-515478	19961007 <--
US 6228127	B1	20010508	US 1998-51464	19980410 <--
PRAI GB 1995-21431	A	19951019 <--		
GB 1996-9549	A	19960508 <--		
WO 1996-EP4353	W	19961007 <--		
OS MARPAT 127:6370				
GI				



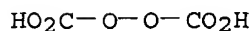
- AB A bleaching or washing composition comprises a peroxy compound and a specified  
Co complex bleach activator (0.005-0.05%). CoCl<sub>2</sub> aqueous solution was added to  
aqueous solution containing 5-sulfosalicylaldehyde disodium salt and refluxed 3 h,  
followed by coupling with ethylenediamine to give the Co complex I. A  
wash composition containing H<sub>2</sub>O<sub>2</sub>, I (5 μmol), and surfactant wash **powder**  
was used to wash a soiled cotton test swatch; showing brightness value  
15.0, vs. <10 using 10 μmol H<sub>2</sub>O<sub>2</sub> only.
- ST cobalt complex bleach activator; sulfosalicylaldehyde cobalt complex  
diamine manuf use
- IT Bleaching agents  
(activator; cobalt complex bleach activator in bleaching or washing  
composition for a fabric or dishes)
- IT Detergents  
(bleach activator in bleaching or washing composition for a fabric or  
dishes)
- IT 15306-22-6P 81670-29-3P 81670-30-6P 81704-61-2P 190013-82-2P  
190013-83-3P 190013-84-4P 190013-85-5P 190013-86-6P 190013-87-7P  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material  
use); PREP (Preparation); USES (Uses)  
(bleach activator in bleaching or washing composition for a fabric or  
dishes)
- IT 7722-84-1, Hydrogen peroxide, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(bleach activator in bleaching or washing composition for a fabric or  
dishes)
- IT 93-59-4, Peroxybenzoic acid 124-43-6 1786-87-4, Diperoxyisophthalic  
acid 2388-12-7, Peroxylauric acid 3313-92-6, Sodium  
percarbonate 7632-04-4, Sodium perborate 10543-57-4,  
N,N,N',N'-Tetraacetyl ethylenediamine 39186-66-8 56265-04-4, Sodium  
4-benzoyloxy benzenesulfonate 66280-55-5, 1,12-  
Diperoxydodecanedioic acid 91125-43-8 125729-84-2 173062-54-9  
174829-11-9 190013-88-8 190088-08-5  
RL: TEM (Technical or engineered material use); USES (Uses)  
(bleach agent; bleach activator in bleaching or washing composition for a  
fabric or dishes)
- IT 95-54-5, 1,2-Diaminobenzene, reactions 107-15-3, Ethylenediamine,  
reactions 109-76-2, 1,3-Diaminopropane 110-60-1, 1,4-Diaminobutane  
39070-63-8, 3,4-Diaminobenzophenone  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(coupling with cobalt complex; bleach activator in bleaching or washing  
composition for a fabric or dishes)
- IT 1194-98-5, 2,5-Dihydroxybenzaldehyde  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction with diamino-m-xylene for intermediate for bleach activator;  
bleach activator in bleaching or washing composition for a fabric or dishes)
- IT 1477-55-0, α,α'-Diamino-m-xylene  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction with dihydroxybenzaldehyde for intermediate for bleach  
activator; bleach activator in bleaching or washing composition for a fabric  
or dishes)
- IT 3313-92-6, Sodium percarbonate 7632-04-4, Sodium  
perborate 66280-55-5, 1,12-Diperoxydodecanedioic acid



RL: TEM (Technical or engineered material use); USES (Uses)  
(bleach agent; bleach activator in bleaching or washing composition for a fabric or dishes)

RN 3313-92-6 HCAPLUS

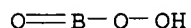
CN Peroxydicarbonic acid, disodium salt (8CI, 9CI) (CA INDEX NAME)



● 2 Na

RN 7632-04-4 HCAPLUS

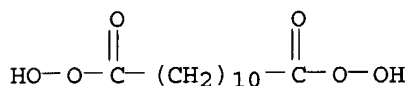
CN Perboric acid (HBO(O<sub>2</sub>)), sodium salt (9CI) (CA INDEX NAME)



● Na

RN 66280-55-5 HCAPLUS

CN Dodecanediperoxoic acid (9CI) (CA INDEX NAME)



L85 ANSWER 16 OF 53 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1996:376859 HCAPLUS

DN 125:36377

ED Entered STN: 28 Jun 1996

TI Aqueous solutions containing perdicarboxylic acids

IN Abe, Ritsuo; Hashimoto, Shinpei; Ohashi, Hideko

PA Nippon Peroxide Co Ltd, Japan

SO Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DT **Patent**

LA Japanese

IC ICM C07C409-34

ICS C02F001-50; D06L001-12; D06L003-02

ICA A01N037-16; C11D007-38

CC 46-6 (Surface Active Agents and Detergents)

Section cross-reference(s): 23

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 08067667	A2	19960312	JP 1995-144136	19950519 <--
PRAI	JP 1994-162956		19940622	<--	

AB Title solns., useful for bleaching, washing, **sterilization**, etc., from composite dicarboxylic acids containing glutaric acid (I) and succinic acid (II) optionally associated with adipic acid (III), which contain 0.05-1.0 mol/(kg solution) (based on dicarboxylic acid conversion) perdicarboxylic acids (A), 0.2-2.2 mol/(kg solution) total dicarboxylic acids except A, 1.0-12.0 mol/(kg solution) H<sub>2</sub>O<sub>2</sub>, and 0.01-3.0% **stabilizers** at 0.1-0.7 mol/(kg solution) II optionally associated with 0.02-0.2 mol/(kg

solution) III and at 0.1-2.0 mol (based on 1 mol I including **perglutaric acid**) dicarboxylic acids except I, are prepared by treating aqueous dicarboxylic acids with ion-exchanger resins or chelating agent resins to reduce total concentration of Fe, Cu, Ni, Cr, Mn, and Zn to  $\leq 2.0$  mg/kg and treating with H<sub>2</sub>O<sub>2</sub> in the presence of **stabilizers**. Thus, aqueous mixture of I 0.50, II 0.56, and III 0.14 mol/(kg solution) was treated by Amberlite IR 124, and then the resulting solution with heavy metal content  $\leq 1$  mg/(kg solution) was treated with 60% aqueous H<sub>2</sub>O<sub>2</sub> and 60% aqueous 1-hydroxyethylidene-1,1-diphosphonic acid at 50° for 72 h and left at 2-3° for 4 days to show no precipitation

ST aq soln perdicarboxylic acid prepn; hydrogen peroxide dicarboxylic acid oxidn; **perglutaric acid** mixt aq soln; persuccinic acid mixt aq soln; **peradipic acid** mixt aq soln; heavy metal removal dicarboxylic acid; bleaching agent perdicarboxylic acid prepn; **sterilization** perdicarboxylic acid prepn; detergent perdicarboxylic acid prepn; ion exchanging resin pretreatment; chelating agent resin pretreatment

IT Chelating agents  
Ion exchangers  
    **Stabilizing agents**  
        (for preparation of aqueous solns. of mixed perdicarboxylic acids by using hydrogen peroxide after removal of heavy metals)

IT Transition metals, processes  
RL: REM (Removal or disposal); PROC (Process)  
        (for preparation of aqueous solns. of mixed perdicarboxylic acids by using hydrogen peroxide after removal of heavy metals)

IT Bleaching agents  
    **Sterilization and Disinfection**  
        (preparation of aqueous solns. of mixed perdicarboxylic acids by using hydrogen peroxide after removal of heavy metals for)

IT Acrylic polymers, uses  
RL: NUU (Other use, unclassified); USES (Uses)  
        (quaternized amine group-containing, ion exchangers; for preparation of aqueous solns. of mixed perdicarboxylic acids by using hydrogen peroxide after removal of heavy metals)

IT Quaternary ammonium compounds, uses  
RL: NUU (Other use, unclassified); USES (Uses)  
        (polymers, acrylic; for preparation of aqueous solns. of mixed perdicarboxylic acids by using hydrogen peroxide after removal of heavy metals)

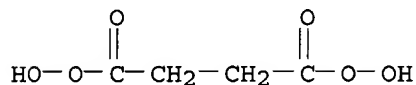
IT 7439-89-6, Iron, processes 7439-96-5, Manganese, processes 7440-02-0, Nickel, processes 7440-47-3, Chromium, processes 7440-50-8, Copper, processes 7440-66-6, Zinc, processes  
RL: REM (Removal or disposal); PROC (Process)  
        (for preparation of aqueous solns. of mixed perdicarboxylic acids by using hydrogen peroxide after removal of heavy metals)

IT 9084-78-0, Amberlite ira 458  
RL: MOA (Modifier or additive use); USES (Uses)  
        (ion-exchangers; for preparation of aqueous solns. of mixed perdicarboxylic acids by using hydrogen peroxide after removal of heavy metals)

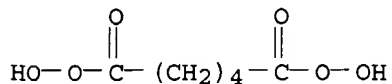
IT 9050-96-8, Amberlite IR 124 54077-23-5, Amberlite 200c  
RL: TEM (Technical or engineered material use); USES (Uses)  
        (ion-exchangers; for preparation of aqueous solns. of mixed perdicarboxylic acids by using hydrogen peroxide after removal of heavy metals)

IT 2279-96-1P, Persuccinic acid 5824-51-1P,  
**Peradipic acid** 28317-46-6P,  
**perglutaric acid**  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
        (preparation of aqueous solns. of mixed perdicarboxylic acids by using hydrogen peroxide after removal of heavy metals)

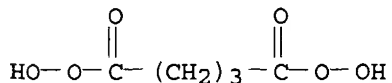
- peroxide after removal of heavy metals)  
 IT 110-15-6P, Succinic acid, preparation 110-94-1P, Glutaric acid  
 124-04-9P, Adipic acid, preparation  
 RL: PUR (Purification or recovery); RCT (Reactant); PREP (Preparation);  
 RACT (Reactant or reagent)  
 (preparation of aqueous solns. of mixed perdicarboxylic acids by using  
 hydrogen  
 peroxide after removal of heavy metals)  
 IT 7722-84-1, Hydrogen peroxide, reactions  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of aqueous solns. of mixed perdicarboxylic acids by using  
 hydrogen  
 peroxide after removal of heavy metals)  
 IT 2809-21-4, 1-Hydroxyethylidene-1,1-diphosphonic acid  
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material  
 use); USES (Uses)  
 (stabilizers; for preparation of aqueous solns. of mixed  
 perdicarboxylic acids by using hydrogen peroxide after removal of heavy  
 metals)  
 IT 2279-96-1P, Persuccinic acid 5824-51-1P,  
 Peradipic acid 28317-46-6P,  
 Perglutaric acid  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material  
 use); PREP (Preparation); USES (Uses)  
 (preparation of aqueous solns. of mixed perdicarboxylic acids by using  
 hydrogen  
 peroxide after removal of heavy metals)  
 RN 2279-96-1 HCAPLUS  
 CN Butanediperoxoic acid (9CI) (CA INDEX NAME)



- RN 5824-51-1 HCAPLUS  
 CN Hexanediperoxoic acid (9CI) (CA INDEX NAME)



- RN 28317-46-6 HCAPLUS  
 CN Pentanediperoxoic acid (9CI) (CA INDEX NAME)



- L85 ANSWER 17 OF 53 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1996:345683 HCAPLUS  
 DN 125:110127  
 ED Entered STN: 14 Jun 1996  
 TI Efficacy of peroxide-containing solutions against microorganisms in  
 biofilms  
 AU Goroncy-Bermes, Peter; Gerresheim, Sandra  
 CS Biol. Lab., Schuelke und Mayr G.m.b.H., Norderstedt, D-22840, Germany

SO Zentralblatt fuer Hygiene und Umweltmedizin (1996), 198(5),  
473-7  
CODEN: ZHUMEO; ISSN: 0934-8859

PB Fischer  
DT Journal  
LA German  
CC 10-5 (Microbial, Algal, and Fungal Biochemistry)  
Section cross-reference(s): 63

AB The bactericidal efficacy of a 1% H2O2 solution was not sufficient against  
Achromobacter xylosoxidans, Flavobacterium meningosepticum, Klebsiella  
pneumoniae, Pseudomonas aeruginosa, P. cepacia, P. fluorescens, and P.  
putida after 1 h of contact time to solve the hygiene problem in  
hospitals. A 1% solution (10% **perglutaric acid**, 28%  
H2O2, < 0.5% perbenzoic acid) was highly and uniformly effective. A 3%  
solution (10% tertiary butylhydroperoxide, 20% phenoxypropanols, 48%  
dipropylene glycol) achieved a reduction in bacterial count of more than 5 log  
steps against all species after 3 h of contact time, unlike the 1% H2O2  
solution. Before cleaning piping systems, the effectiveness test of the  
**disinfectant** solution with the isolates is suggested.

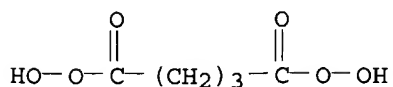
ST hydrogen peroxide aq **disinfectant** biofilm microorganism  
IT Bacteria  
**Bactericides, Disinfectants, and Antiseptics**  
Hospitals  
Hygiene  
(efficacy of peroxide-containing solns. against microorganisms in biofilms)

IT Pharmaceutical dosage forms  
(films, efficacy of peroxide-containing solns. against microorganisms in  
biofilms)

IT 75-91-2, tert. Butylhydroperoxide 93-59-4, Perbenzoic acid 7722-84-1,  
Hydrogen peroxide, biological studies 25265-71-8, Dipropyleneglycol  
**28317-46-6, Perglutaric acid**  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological  
study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES  
(Uses)  
(efficacy of peroxide-containing solns. against microorganisms in biofilms)

IT **28317-46-6, Perglutaric acid**  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological  
study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES  
(Uses)  
(efficacy of peroxide-containing solns. against microorganisms in biofilms)

RN 28317-46-6 HCAPLUS  
CN Pentanediperoxoic acid (9CI) (CA INDEX NAME)



L85 ANSWER 18 OF 53 HCAPLUS COPYRIGHT 2004 ACS on STN  
AN 1996:194718 HCAPLUS  
DN 124:231856  
ED Entered STN: 05 Apr 1996  
TI Preparation of alkanedicarboxylic monoester peracids as microbicides and  
**disinfectants**  
IN Carr, Graham; James, Alun Pryce  
PA Solvay Interlox Ltd., UK  
SO PCT Int. Appl., 23 pp.  
CODEN: PIXXD2  
DT **Patent**  
LA English  
IC ICM C07C409-24

ICS C07C407-00; A01N037-16  
 CC 23-17 (Aliphatic Compounds)  
 Section cross-reference(s): 45

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9534537	A1	19951221	WO 1995-GB1398	19950615 <--
	W:	AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TT			
	RW:	KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
	AU 9526794	A1	19960105	AU 1995-26794	19950615 <--
	AU 693563	B2	19980702		
	EP 765309	A1	19970402	EP 1995-921921	19950615 <--
	EP 765309	B1	19990407		
	R:	DE, ES, FR, GB, IT, NL, SE			
	JP 10501805	T2	19980217	JP 1995-501809	19950615 <--
	ES 2132676	T3	19990816	ES 1995-921921	19950615 <--
	US 6207108	B1	20010327	US 1997-750535	19970228 <--
PRAI	GB 1994-12051	A	19940616 <--		
	WO 1995-GB1398	W	19950615 <--		

OS MARPAT 124:231856

AB Storage **stable**, aqueous acidic solns. having a pH range of 1-5 comprising at least one ester peracid  $\text{R}_2\text{C}(\text{CH}_2)_x\text{CO}_3\text{H}$  (R = C1-4 alkyl; x = 1-4), useful as domestic and industrial **disinfectants** with reduced odor compared with C1-3 aliphatic peracids, are prepared by contacting an aqueous solution of a carboxylic acid  $\text{R}_2\text{C}(\text{CH}_2)_x\text{CO}_2\text{H}$  (R, x = same as above) with an inorg. peroxygen compound, preferably hydrogen peroxide, at a pH of less than 4 until at least some ester peracid is produced, and thereafter adjusting the pH to be in the range of from 1 to 5, if necessary. Thus, an aqueous solution (pH 1.5-2) comprising 10 weight% monomethyl glutarate and

20 weight%  $\text{H}_2\text{O}_2$  was prepared by dissolving monomethyl glutarate in  $\text{H}_2\text{O}$  and adding the required amount of 85 weight%  $\text{H}_2\text{O}_2$  over a period of 10 min, the stored at ambient temperature for 21 days, and analyzed by HPLC at intervals during storage. The anal. of the sample solution showed that monomethyl glutarate, glutaric acid, **perglutaric acid**, and monomethyl **perglutaric acid** content of 18.5, 1.1, trace, and 0.36 weight%, resp. after 1 day and 12.56, 2.77, 1.73, and 2.92 weight%, resp.,

after

21 days. This solution comprising 20 weight%  $\text{H}_2\text{O}_2$  was particularly advantageous compared to the 10, 15, 25, and 30 weight% solns. In another example, a solution (solution A) of monomethyl glutarate plus **stabilizer** was by dissolving 5.39 g monomethyl glutarate and 0.189 g hydroxyethylidenephosphonic acid (DEQUEST 2010) (**stabilizer**) in 27.59 g demineralized water and adding to this solution 5.99 g 85 weight%  $\text{H}_2\text{O}_2$  over a period of 10 min with gentle stirring. The solution was stored for .apprx.2 wk and found to have no discernible odor. Also prepared were a solution of monomethyl persuccinate and that of a mixture of monomethyl ester peracids of adipic, glutaric, and succinic acids. These peracids were screened for activity against *Pseudomonas aeruginosa*, *Staphylococcus aureus*, and *Saccharomyces cerevisiae* and yeast *Saccharomyces cerevisiae* and showed a **disinfection** performance broadly comparable to that of peracetic acid.

ST alkanedicarboxylic monoester peracid prepn microbicide  
**disinfectant**; aliph dicarboxylic monoester peracid prepn microbicide

IT **Bactericides, Disinfectants, and Antiseptics**  
 (preparation of alkanedicarboxylic monoester peracids as microbicides and

- disinfectants)**
- IT Carboxylic acids, preparation  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); TEM (Technical or engineered material use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (di-, aliphatic, preparation of alkanedicarboxylic monoester peracids as microbicides and **disinfectants**)
- IT Carboxylic acids, preparation  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); TEM (Technical or engineered material use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (peroxy, preparation of alkanedicarboxylic monoester peracids as microbicides and **disinfectants**)
- IT 55656-52-5P, Monomethyl persuccinate 62103-20-2P, Monomethyl peradipate  
 65566-30-5P, Monomethyl perglutarate  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); TEM (Technical or engineered material use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of alkanedicarboxylic monoester peracids as microbicides and **disinfectants**)
- IT 627-91-8, Monomethyl adipate 1501-27-5, Monomethyl glutarate  
 3878-55-5, Monomethyl succinate 7722-84-1, Hydrogen peroxide, reactions  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of alkanedicarboxylic monoester peracids as microbicides and **disinfectants**)
- IT 2809-21-4  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (**stabilizer**; preparation of alkanedicarboxylic monoester peracids as microbicides and **disinfectants**)

L85 ANSWER 19 OF 53 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1995:822989 HCAPLUS

DN 123:202988

ED Entered STN: 30 Sep 1995

TI Use of peroxy acid or precursor in process for wet cleaning of textiles

IN Lemaire, Petrus Joseph

PA Stichting Instituut Voor Reinigingstechnieken TNO, Neth.

SO PCT Int. Appl., 31 pp.

CODEN: PIXXD2

DT **Patent**

LA English

IC ICM C11D011-00

CC 46-5 (Surface Active Agents and Detergents)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9504128	A1	19950209	WO 1994-NL177	19940729 <--
	W: AU, BR, CA, FI, JP, NO, US				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	NL 9301339	A	19950216	NL 1993-1339	19930730 <--
	AU 9476251	A1	19950228	AU 1994-76251	19940729 <--
	EP 711337	A1	19960515	EP 1994-926403	19940729 <--
	R: BE, DE, FR, GB, NL				
PRAI	NL 1993-1339		19930730 <--		
	WO 1994-NL177		19940729 <--		
OS	MARPAT 123:202988				
AB	Textiles are cleaned (especially in industrial laundering using a washing tube) by using soaking, ≥1 sudsing, rinsing, bleaching, and neutralization steps and including in a second sudsing step or in the rinsing step a peroxy acid having ≥6 C atoms (e.g.,				

diperoxydodecanedioic acid) or a compound converted in situ into such a peroxy acid. The process gives good washing and **disinfecting** efficiency and minimizes water and energy use.

ST bleaching peroxy acid industrial laundering; **disinfecting** peroxy acid industrial laundering; diperoxydodecanedioic acid bleaching industrial laundering

IT **Laundering**  
(industrial; peroxy acids for bleaching and **disinfecting** textiles in)

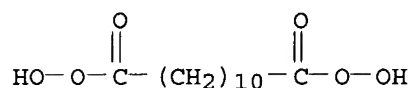
IT **Bactericides, Disinfectants, and Antiseptics**  
Bleaching agents  
(peroxy acids; for bleaching and **disinfecting** textiles in industrial laundering)

IT **66280-55-5, Diperoxydodecanedioic acid**  
RL: NUU (Other use, unclassified); TEM (Technical or engineered material use); USES (Uses)  
(for bleaching and **disinfecting** textiles in industrial laundering)

IT **66280-55-5, Diperoxydodecanedioic acid**  
RL: NUU (Other use, unclassified); TEM (Technical or engineered material use); USES (Uses)  
(for bleaching and **disinfecting** textiles in industrial laundering)

RN 66280-55-5 HCAPLUS

CN Dodecanediperoxoic acid (9CI) (CA INDEX NAME)



L85 ANSWER 20 OF 53 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1995:277095 HCAPLUS

DN 122:34037

ED Entered STN: 07 Jan 1995

TI Lavatory cleansing blocks containing active oxygen and acid

IN Scialla, Stefano

PA USA

SO Eur. Pat. Appl., 8 pp.  
CODEN: EPXXDW

DT **Patent**

LA English

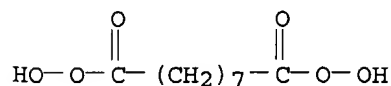
IC ICM C11D017-00  
ICS C11D003-39; C11D003-20

CC 46-6 (Surface Active Agents and Detergents)

FAN.CNT 1

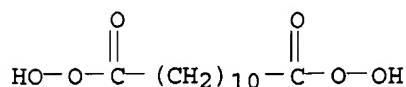
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 619366	A1	19941012	EP 1993-200961	19930405 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
	WO 9423002	A1	19941013	WO 1994-US3163	19940323 <--
	W: AU, CA, CZ, JP, PL, RU, US				
	CA 2159821	AA	19941013	CA 1994-2159821	19940323 <--
	AU 9464146	A1	19941024	AU 1994-64146	19940323 <--
	JP 08508769	T2	19960917	JP 1994-522178	19940323 <--
PRAI	EP 1993-200961		19930405 <--		
	WO 1994-US3163		19940323 <--		
AB	The title blocks contain H2O2 or a source of H2O2, an acid, and a surfactant and are suitable for in-rim and in-cistern use, giving good cleaning and <b>disinfecting</b> and removing scale, odors, and stains. A block contained Na dodecylbenzenesulfonate 55, lauryl ether sulfate 2,				

- Na persulfate 13, **Na<sub>2</sub>SO<sub>4</sub>** 10, citric acid 15, perfume 4, and colorant-water 1%.
- ST lavatory block cleaning acid peroxide; hydrogen peroxide lavatory cleaning block; toilet cleaning block acid peroxide; citric acid peroxide lavatory block; scale inhibitor lavatory cleansing block
- IT Toilets  
(cleansing blocks containing acids and peroxides for)
- IT Peroxides, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(lavatory cleansing blocks containing acids and)
- IT **Bactericides, Disinfectants, and Antiseptics**  
Detergents  
(lavatory cleansing blocks containing acids and peroxides)
- IT Scale inhibitors  
(lavatory cleansing blocks containing acids and peroxides as)
- IT Incrustations  
(lavatory cleansing blocks containing acids and peroxides for prevention of)
- IT Carboxylic acids, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(lavatory cleansing blocks containing peroxides and)
- IT Bleaching agents  
(peroxides; lavatory cleansing blocks containing acids and)
- IT Toilets  
(urinals, cleansing blocks containing acids and peroxides for)
- IT 80-43-3, Dicumyl peroxide 93-59-4, Perbenzoic acid 94-36-0, Dibenzoyl peroxide, uses 105-74-8, Dilauroyl peroxide **1941-79-3**, **Diperoxyazelaic acid** 2388-12-7, Perlauric acid 4452-58-8, Sodium percarbonate 7722-84-1, Hydrogen peroxide, uses 7775-27-1, Sodium persulfate 15593-29-0, Sodium persulfate 28831-12-1, Sodium persulfate **66280-55-5**, Diperoxydodecanedioic acid 78948-87-5  
RL: TEM (Technical or engineered material use); USES (Uses)  
(lavatory cleansing blocks containing acids and)
- IT 77-92-9, Citric acid, uses 87-69-4, Tartaric acid, uses 110-15-6, Succinic acid, uses 110-16-7, Maleic acid, uses 144-62-7, Oxalic acid, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(lavatory cleansing blocks containing peroxides and)
- IT **1941-79-3, Diperoxyazelaic acid**  
**66280-55-5**, Diperoxydodecanedioic acid  
RL: TEM (Technical or engineered material use); USES (Uses)  
(lavatory cleansing blocks containing acids and)
- RN 1941-79-3 HCAPLUS
- CN Nonanediperoxoic acid (9CI) (CA INDEX NAME)



RN 66280-55-5 HCAPLUS

CN Dodecanediperoxoic acid (9CI) (CA INDEX NAME)





AN 1994:654356 HCAPLUS  
 DN 121:254356  
 ED Entered STN: 26 Nov 1994  
 TI Inhibition of microbial growth in food-industry aqueous streams.  
 IN Lokkesmoe, Keith D.; Olson, Keith E.  
 PA Ecolab Inc., USA  
 SO PCT Int. Appl., 35 pp.  
 CODEN: PIXXD2

DT **Patent**

LA English

IC ICM A01N037-16

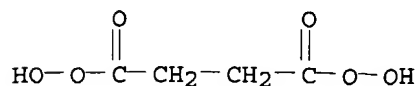
ICS C02F001-72

CC 17-4 (Food and Feed Chemistry)

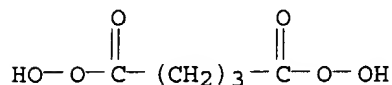
Section cross-reference(s): 5

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9421122	A1	19940929	WO 1993-US7952	19930824 <--
	W: AU, BR, CA, JP, KR, NZ				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	US 5409713	A	19950425	US 1993-32624	19930317 <--
	CA 2156299	AA	19940929	CA 1993-2156299	19930824 <--
	AU 9350888	A1	19941011	AU 1993-50888	19930824 <--
	AU 675975	B2	19970227		
	CN 1092385	A	19940921	CN 1993-120580	19931201 <--
PRAI	US 1993-32624	A	19930317 <--		
	WO 1993-US7952	W	19930824 <--		
AB	Microbial growth is inhibited in food-industry aqueous streams with percarboxylic acids, such as peracetic acid, and, optionally, H <sub>2</sub> O <sub>2</sub> . The aqueous streams are used i.a. in the transport of fruits or vegetables for processing.				
ST	food industry aq stream microbicide percarboxylate				
IT	<b>Bactericides, Disinfectants, and Antiseptics</b>				
	Food				
	Fungicides and Fungistats				
	(inhibition of microbial growth in food-industry aqueous streams)				
IT	Carboxylic acids, biological studies				
	RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); FFD (Food or feed use); BIOL (Biological study); USES (Uses)				
	(peroxy, inhibition of microbial growth in food-industry aqueous streams)				
IT	79-21-0, Peracetic acid. 2279-96-1, Persuccinic acid.				
	7722-84-1, Hydrogen peroxide, biological studies 14156-10-6, Perdecanoic acid. 28317-46-6, Perglutaric acid.				
	33734-57-5, Peroctanoic acid.				
	RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); FFD (Food or feed use); BIOL (Biological study); USES (Uses)				
	(inhibition of microbial growth in food-industry aqueous streams)				
IT	2279-96-1, Persuccinic acid. 28317-46-6, Perglutaric acid.				
	RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); FFD (Food or feed use); BIOL (Biological study); USES (Uses)				
	(inhibition of microbial growth in food-industry aqueous streams)				
RN	2279-96-1 HCAPLUS				
CN	Butanediperoxoic acid (9CI) (CA INDEX NAME)				



RN 28317-46-6 HCAPLUS  
 CN Pentanediperoxoic acid (9CI) (CA INDEX NAME)



L85 ANSWER 22 OF 53 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1994:633512 HCAPLUS

DN 121:233512

ED Entered STN: 12 Nov 1994

TI Preparation of particles containing water-insoluble organic peroxy acid for use in laundry detergents

IN Chapman, Benjamin Edgar; Gabriel, Steven Matthew; Boucher, Jeffrey Edward; Strauss, Daniel Lewis

PA The Procter and Gamble Co., USA

SO Eur. Pat. Appl., 15 pp.

CODEN: EPXXDW

DT **Patent**

LA English

IC ICM C11D003-39

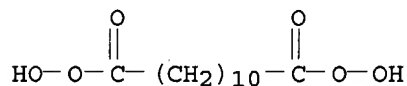
CC 46-5 (Surface Active Agents and Detergents)

FAN.CNT 1

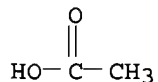
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 592033	A1	19940413	EP 1993-202780	19930928 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
	CA 2107450	AA	19940408	CA 1993-2107450	19930930 <--
	JP 06212194	A2	19940802	JP 1993-276069	19931007 <--
	US 5536435	A	19960716	US 1993-157494	19931123 <--
PRAI	US 1992-957578		19921007	<--	
OS	MARPAT 121:233512				
AB	A substantially water-insol. peroxy acid such as Me(CH <sub>2</sub> ) <sub>8</sub> NHCO(CH <sub>2</sub> ) <sub>4</sub> C(O)OOH is mixed with a peroxy acid- <b>stable</b> , water-soluble surfactant such as an alkylbenzenesulfonate and with a <b>crystalline</b> peroxy acid-compatible material (e.g., Na <sub>2</sub> SO <sub>4</sub> ), and the mixture is formed into particles which show good solubility/dispersibility in water and are useful in laundry detergents.				
ST	bleach peroxycarboxylic acid dispersibility soly; <b>peroxyadipic acid</b> nonylamide bleach dispersibility; laundry detergent bleach peroxycarboxylic; alkylbenzenesulfonate peroxy acid bleach dispersibility; sulfate peroxy acid bleach dispersibility; dispersant peroxy acid bleach laundering				
IT	Dispersing agents (granules containing water-insol. peroxycarboxylic acid bleach and, for detergents)				
IT	Surfactants (granules containing water-insol. peroxycarboxylic acid bleach and, water-dispersible)				
IT	Granulation (of water-insol. peroxycarboxylic acid bleach, for detergents)				
IT	Bleaching agents (peroxycarboxylic acids, water-insol., water-dispersible granules containing)				
IT	Detergents (laundry, peroxycarboxylic acid bleach for, water-insol., granules containing)				
IT	Carboxylic acids, uses RL: USES (Uses)				

(peroxy, bleaching agents, water-insol., water-dispersible granules containing)

- IT **66280-55-5**, Diperoxydodecanedioic acid 104788-63-8,  
6-Nonylamino-6-oxoperoxyhexanoic acid 111875-82-2, 4-Nonylamino-4-oxoperoxybutyric acid 116710-02-2 131651-53-1 131651-54-2  
131651-55-3 131651-56-4 158382-96-8  
RL: USES (Uses)  
(bleaching agents, water-insol., water-dispersible granules containing)
- IT **127-09-3**, Sodium acetate 556-63-8, Lithium formate  
**7601-54-9**, Sodium phosphate **7632-04-4**, Sodium perborate  
**7757-82-6**, **Sodium sulfate**, uses 7779-88-6,  
Zinc nitrate 10377-48-7, Lithium sulfate 15475-67-9, Sodium phosphite  
RL: USES (Uses)  
(granules containing water-insol. peroxy acid bleach and,  
water-dispersible)
- IT **66280-55-5**, Diperoxydodecanedioic acid  
RL: USES (Uses)  
(bleaching agents, water-insol., water-dispersible granules containing)
- RN 66280-55-5 HCAPLUS  
CN Dodecanediperoxoic acid (9CI) (CA INDEX NAME)

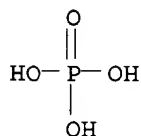


- IT **127-09-3**, Sodium acetate **7601-54-9**, Sodium phosphate  
**7632-04-4**, Sodium perborate **7757-82-6**, **Sodium sulfate**, uses  
RL: USES (Uses)  
(granules containing water-insol. peroxy acid bleach and,  
water-dispersible)
- RN 127-09-3 HCAPLUS  
CN Acetic acid, sodium salt (7CI, 8CI, 9CI) (CA INDEX NAME)



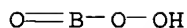
● Na

- RN 7601-54-9 HCAPLUS  
CN Phosphoric acid, trisodium salt (8CI, 9CI) (CA INDEX NAME)



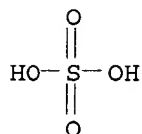
●<sub>3</sub> Na

- RN 7632-04-4 HCAPLUS  
CN Perboric acid (HBO(O<sub>2</sub>)), sodium salt (9CI) (CA INDEX NAME)



● Na

RN 7757-82-6 HCAPLUS  
 CN Sulfuric acid disodium salt (8CI, 9CI) (CA INDEX NAME)



●2 Na

L85 ANSWER 23 OF 53 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1994:292139 HCAPLUS

DN 120:292139

ED Entered STN: 11 Jun 1994

TI Peracids-containing microbicidal compositions.

IN Wright, Christopher Thomas; Davies, Sandra Joyce

PA Solvay Interlox Ltd., UK

SO PCT Int. Appl., 23 pp.

CODEN: PIXXD2

DT **Patent**

LA English

IC ICM A01N037-16

ICI A01N037-16, A01N059-00, A01N037-02

CC 5-2 (Agrochemical Bioregulators)

Section cross-reference(s): 17, 63

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9406294	A1	19940331	WO 1993-GB1823	19930826 <--
	W: AU, BR, CA, FI, JP, US				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP	660666	A1	19950705	EP 1994-910253	19930826 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, NL, PT, SE				
AU	680831	B2	19970814	AU 1993-49709	19930826 <--
AU	9349709	A1	19940412		
BR	9307056	A	19990629	BR 1993-7056	19930826 <--
FI	9501197	A	19950315	FI 1995-1197	19950315 <--
PRAI	GB 1992-19465	A	19920915 <--		
	WO 1993-GB1823	W	19930826 <--		

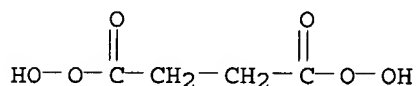
AB Microbicidal compns. comprise aliphatic peracids, the corresponding aliphatic acid, H<sub>2</sub>O<sub>2</sub> and, optionally, other aliphatic acid(s). The mol. ratio of aliphatic

acid to peracid is >5:1. The compns. have improved activity as virucides, superior **stability** when diluted with hard water, improved residual activity, and superior **disinfection** performance for vegetables.

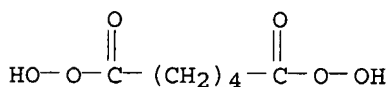
Preferably, the peracid is peracetic acid and the optional aliphatic acid is acetic or propionic acid. A composition containing peracetic acid 4, acetic

acid

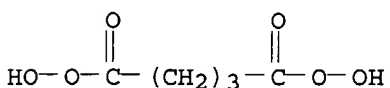
47, and H2O2 2% weight/weight was used for lettuce disinfection...  
 ST aliph acid peracid microbicide  
 IT Vegetable  
     (disinfectants for, peracids-containing compns. as)  
 IT **Bactericides, Disinfectants, and Antiseptics**  
     Fungicides and Fungistats  
     Virucides and Virustats  
     (peracids-containing compns.)  
 IT Carboxylic acids, uses  
     RL: USES (Uses)  
     (aliphatic, microbicidal compns. containing)  
 IT Carboxylic acids, uses  
     RL: USES (Uses)  
     ( peroxy, microbicidal compns. containing)  
 IT 64-19-7, Acetic acid, uses 79-09-4, Propionic acid, uses 79-21-0,  
     Peracetic acid 2279-96-1, Persuccinic acid 4212-43-5,  
     Perpropionic acid 5824-51-1, **Peradipic acid**  
     7722-84-1, Hydrogen peroxide, uses 13122-71-9, Perbutyric acid  
     28317-46-6, **Perglutaric acid**  
     RL: USES (Uses)  
     (microbicidal compns. containing)  
 IT 2279-96-1, Persuccinic acid 5824-51-1, **Peradipic**  
     **acid 28317-46-6, Perglutaric acid**  
     RL: USES (Uses)  
     (microbicidal compns. containing)  
 RN 2279-96-1 HCAPLUS  
 CN Butanediperoxoic acid (9CI) (CA INDEX NAME)



RN 5824-51-1 HCAPLUS  
 CN Hexanediperoxoic acid (9CI) (CA INDEX NAME)



RN 28317-46-6 HCAPLUS  
 CN Pentanediperoxoic acid (9CI) (CA INDEX NAME)



L85 ANSWER 24 OF 53 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1994:14963 HCAPLUS  
 DN 120:14963  
 ED Entered STN: 08 Jan 1994  
 TI **Disinfectant** compositions containing peroxy and organic acids  
 IN Benjamins, Peter; De Boer, Robbert  
 PA Unilever N. V., Neth.; Unilever PLC  
 SO Eur. Pat. Appl., 9 pp.  
     CODEN: EPXXDW  
 DT **Patent**

LA English  
 IC ICM A01N037-16  
 ICI A01N037-16, A01N037-02, A01N037-04, A01N025-04  
 CC 63-8 (Pharmaceuticals)  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 569066	A1	19931110	EP 1993-200974	19930402 <--
	EP 569066	B1	19951025		
	R: CH, DE, ES, FR, GB, IT, LI, NL, SE				
	ES 2079940	T3	19960116	ES 1993-200974	19930402 <--
	CA 2093888	AA	19931017	CA 1993-2093888	19930413 <--
	AU 9336842	A1	19931021	AU 1993-36842	19930413 <--
	AU 667085	B2	19960307		
	BR 9301552	A	19931019	BR 1993-1552	19930415 <--
	ZA 9302689	A	19941016	ZA 1993-2689	19930416 <--
PRAI	EP 1992-201093		19920416	<--	

OS MARPAT 120:14963

AB A concentrated **disinfectant** compns., pH=2-6, comprises (a) a solid and substantially water-insol. organic peroxy acid 0.1-50, and (b) a water-soluble organic acid 0.1-50%. The **disinfectants** are suitable for **disinfecting** objects and surfaces at locations where microbial contamination is of major concern, such as in hospitals and the food and drinks industry. A **disinfectant** compns. contained water 60.50, dobanic acid-103 7.00, Marlipal 3.33, citric acid (I) 5.5, 27% 1,12-diperoxydodecane dioic acid 18.52, and minor ingredients 0.05 parts. The logarithmic decimal reduction of the composition was 1.14 as compared to

0.03

for the controls containing no I.

ST **disinfectant** peroxy acid org acid; citric acid peroxydodecane dioic acid **disinfectant**

IT Sequestering agents

(**disinfectant** compns. containing peroxy acids and organic acids and)

IT **Bactericides, Disinfectants, and Antiseptics**

(peroxy acids and organic acids in)

IT Amines, biological studies

RL: BIOL (Biological study)

(polycarboxy derivative, **disinfectant** compns. containing peroxy acids and organic acids and)

IT Carboxylic acids, biological studies

RL: BIOL (Biological study)

(di-, C8-13, **disinfectant** compns. containing organic acids and)

IT Acids, biological studies

RL: USES (Uses)

(organic, peroxy, **disinfectant** compns. containing organic acids and)

IT Carboxylic acids, biological studies

RL: BIOL (Biological study)

(peroxy, **disinfectant** compns. containing organic acids and)

IT Amines, biological studies

RL: BIOL (Biological study)

(poly-, polycarboxy derivative, **disinfectant** compns. containing peroxy acids and organic acids and)

IT **66280-55-5**, Dodecanediperoxoic acid

RL: USES (Uses)

(**disinfectant** compns. containing organic acids and)

IT 64-19-7, Acetic acid, biological studies 77-92-9, Citric acid, biological studies 79-09-4, Propionic acid, biological studies 110-15-6, Succinic acid, biological studies

RL: BIOL (Biological study)

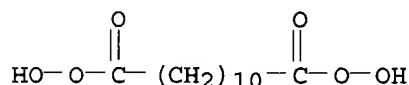
(**disinfectant** compns. containing peroxy acids and)

IT 139-13-9 7664-38-2, Phosphoric acid, biological studies

RL: USES (Uses)

(**disinfectant** compns. containing peroxy acids and organic acids and)

IT 66280-55-5, Dodecanediperoxoic acid  
 RL: USES (Uses)  
 (disinfectant compns. containing organic acids and)  
 RN 66280-55-5 HCAPLUS  
 CN Dodecanediperoxoic acid (9CI) (CA INDEX NAME)

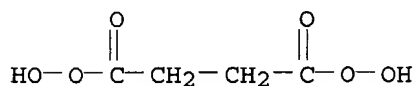


L85 ANSWER 25 OF 53 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1993:175895 HCAPLUS  
 DN 118:175895  
 ED Entered STN: 01 May 1993  
 TI Peroxy acid-containing synergistic antimicrobial composition  
 IN Oakes, Thomas R.; Stanley, Patricia M.; Keller, Jerome D.  
 PA ECOLAB Inc., USA  
 SO PCT Int. Appl., 54 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 IC ICM A01N037-16  
 ICI A01N037-16  
 CC 63-8 (Pharmaceuticals)  
 FAN.CNT 3

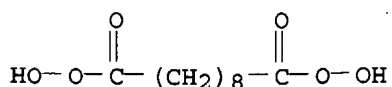
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9301716	A1	19930204	WO 1992-US4519	19920529 <--
	W: AU, BR, CA, FI, JP, KR, NO				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE				
	US 5200189	A	19930406	US 1991-734580	19910723 <--
	ZA 9202751	A	19921230	ZA 1992-2751	19920415 <--
	CA 2108177	AA	19930124	CA 1992-2108177	19920529 <--
	CN 1068705	A	19930210	CN 1992-103834	19920529 <--
	CN 1050734	B	20000329		
	AU 9221769	A1	19930223	AU 1992-21769	19920529 <--
	AU 652274	B2	19940818		
	EP 597877	A1	19940525	EP 1992-913905	19920529 <--
	EP 597877	B1	19971217		
	EP 597877	B2	20020828		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, MC, NL, SE				
	JP 06510526	T2	19941124	JP 1992-502771	19920529 <--
	JP 2874041	B2	19990324		
	AT 161142	E	19980115	AT 1992-913905	19920529 <--
	ES 2112908	T3	19980416	ES 1992-913905	19920529 <--
	US 5314687	A	19940524	US 1992-932612	19920820 <--
	US 5718910	A	19980217	US 1993-4075	19930113 <--
	NO 9304217	A	19931122	NO 1993-4217	19931122 <--
	FI 9400231	A	19940317	FI 1994-231	19940117 <--
PRAI	US 1991-734580	A	19910723 <--		
	WO 1992-US4519	A	19920529 <--		

AB Mixts. of C1-4 peroxy-carboxylic acids with C6-18 aliphatic peroxy acids are synergistic microbicides. Concs. comprising the above components, diluted with water, give solns. (pH 2-8) usable as **disinfectants** in hospitals, food service, etc. A concentrate comprised peracetic acid 50, HACO 22, percaprylic acid 3.75, percapric acid 1.25, NAS 8D (n-octanesulfonate hydrotrope coupler) 10, and water 13% by weight. The peracetic acid was a 10.42% solution containing 34% HACO and 10% H2O2. The concentrate diluted to 1000 ppm and adjusted to pH 3.5, controlled Staphylococcus aureus and Escherichia

- coli, in vitro.
- ST microbicide synergism peroxydicarboxylate peroxy acid; **disinfectant**  
synergistic food service hospital
- IT Hospitals  
Textiles  
(**disinfectants** for, synergistic, peroxydicarboxylic acid- and  
peroxy acid-containing)
- IT Food  
(processing of, **disinfectants** for, synergistic,  
peroxydicarboxylic acid- and peroxy acid-containing compns.)
- IT Carboxylic acids, biological studies  
RL: BIOL (Biological study)  
(aliphatic, peroxy, C6-18, microbicidal compns. containing)
- IT Carboxylic acids, biological studies  
RL: BIOL (Biological study)  
(peroxy, C1-4, microbicidal compns. containing)
- IT **Bactericides, Disinfectants, and Antiseptics**  
Fungicides and Fungistats  
(**synergistic**, peroxydicarboxylic acid mixts. with peroxy fatty  
acids)
- IT 147018-68-6 147018-69-7 147018-70-0 147018-71-1 147018-72-2  
147018-73-3  
RL: USES (Uses)  
(microbicide, synergistic)
- IT 79-21-0D, Peroxyacetic acid, mixts. with peroxy fatty acids  
**2279-96-1D**, Peroxysuccinic acid, mixts. with peroxy fatty acids  
4212-43-5D, Peroxypropionic acid, mixts. with peroxy fatty acids  
**5796-85-0D**, **Decanediperoxoic acid**, mixts. with  
C1-4 peroxydicarboxylic acids **5824-51-1D**, **Diperoxyadipic**  
**acid**, mixts. with C1-4 peroxydicarboxylic acids 14156-10-6D,  
Peroxydecanoic acid, mixts. with C1-4 peroxydicarboxylic acids  
21860-08-2D, Peroxyglycolic acid, mixts. with peroxy fatty acids  
33734-57-5D, Peroxyoctanoic acid, mixts. with C1-4 peroxydicarboxylic acids  
77155-29-4D, mixts. with C1-4 peroxydicarboxylic acids 93691-93-1D, mixts.  
with C1-4 peroxydicarboxylic acids  
RL: USES (Uses)  
(microbicides, synergistic)
- IT **2279-96-1D**, Peroxysuccinic acid, mixts. with peroxy fatty acids  
**5796-85-0D**, **Decanediperoxoic acid**, mixts. with  
C1-4 peroxydicarboxylic acids **5824-51-1D**, **Diperoxyadipic**  
**acid**, mixts. with C1-4 peroxydicarboxylic acids  
RL: USES (Uses)  
(microbicides, synergistic)
- RN 2279-96-1 HCAPLUS
- CN Butanediperoxoic acid (9CI) (CA INDEX NAME)

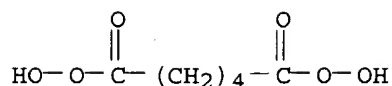


- RN 5796-85-0 HCAPLUS
- CN Decanediperoxoic acid (9CI) (CA INDEX NAME)



- RN 5824-51-1 HCAPLUS
- CN Hexanediperoxoic acid (9CI) (CA INDEX NAME)





L85 ANSWER 26 OF 53 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1992:221658 HCAPLUS

DN 116:221658

ED Entered STN: 31 May 1992

TI Aqueous **disinfectant** compositions containing peroxy acids and sequestering agents as activity enhancers

IN Ploumen, Jan Joseph Hubert; Borgmann-Strahsen, Renate

PA AKZO N. V., Neth.

SO Eur. Pat. Appl., 10 pp.

CODEN: EPXXDW

DT **Patent**

LA English

IC ICM A01N037-16

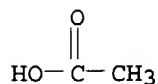
ICI A01N037-16, A01N037-44, A01N025-04

CC 63-8 (Pharmaceuticals)

FAN.CNT 1

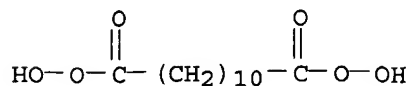
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 461700	A1	19911218	EP 1991-201348	19910604 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	JP 06316505	A2	19941115	JP 1991-166224	19910612 <--
PRAI	EP 1990-201510		19900612	<--	
AB	An aqueous <b>disinfectant</b> composition comprising a solid substantially water-insol. organic peroxy acid and an effective amount of a sequestering agent has enhanced effectiveness against <i>Pseudomonas aeruginosa</i> and various bacteria. The <b>disinfectants</b> are intended to be used for <b>disinfecting</b> objects and surfaces in domestic, industrial, and medical uses. A <b>disinfectant</b> liquid comprising 1,12-diperoxy dodecanedioic acid 176, nitrilotriacetic acid 200 ppm, Na2B4O7.10H2O 14, K2HPO4 13.3, NaAcO 8.4, a linear alkylbenzene sulfonate 0.5 g/L, pH 5 killed all of the <i>P. aeruginosa</i> in <1 min in the qual. DGHM suspension test.				
ST	<b>disinfectant</b> peroxy acid sequestering agent; peroxydodecanedioate nitrilotriacetate <b>disinfectant</b> ; <i>Pseudomonas</i> peroxy acid sequestering agent				
IT	Borates				
	RL: BIOL (Biological study) (buffers containing, in <b>disinfectant</b> mixture containing peroxy acids and sequestering agents)				
IT	Phosphates, biological studies				
	RL: BIOL (Biological study) (buffers containing, in <b>disinfecting</b> composition of peroxy acids and sequestering agents)				
IT	<i>Pseudomonas aeruginosa</i> (inhibition of, by peroxy acid and sequestering agent combinations)				
IT	Sequestering agents (mixts. with peroxy acids, <b>disinfectant</b> )				
IT	<b>Bactericides, Disinfectants, and Antiseptics</b> (peroxy acids and sequestering agents and surfactants in)				
IT	<b>Sulfonates</b>				
	RL: BIOL (Biological study) (alkylarene, with <b>alkali metal</b> , as surfactant for peroxy acid <b>disinfectant</b> )				
IT	<b>Carboxylic acids</b> , biological studies				
	RL: BIOL (Biological study)				

- (di-, C8-13, **diperoxy**, as **disinfectants**, activity enhancement by sequestering agent of)
- IT Surfactants  
(ionic, **disinfectant** solns. containing peroxy acids and sequestering agents and)
- IT Surfactants  
(nonionic, **disinfectant** solns. containing peroxy acids and sequestering agents and)
- IT Carboxylic acids, compounds  
RL: BIOL (Biological study)  
(peroxy, mixts. with sequestering agents, **disinfectant**)
- IT Acids, compounds  
RL: BIOL (Biological study)  
(peroxy, mixts., with sequestering agents, **disinfectant**)
- IT Amino acids, polymers  
RL: BIOL (Biological study)  
(polymers, as sequestering agent for peroxy acid **disinfectant**)
- IT 64-19-7D, Acetic acid, salts  
RL: USES (Uses)  
(buffers containing, in **disinfectant** mixture containing peroxy acids and sequestering agents)
- IT 64-19-7D, Acetic acid, salts 127-09-3 1330-43-4, Boron sodium oxide (B4Na2O7) 7664-38-2D, Phosphoric acid, salts 7758-11-4 10043-35-3D, Boric acid, salts  
RL: USES (Uses)  
(buffers containing, in **disinfecting** composition of peroxy acids and sequestering agents)
- IT 60-00-4D, EDTA, mixture with peroxy acids 139-13-9D, Nitrilotriacetic acid, mixture with peroxy acids 66280-55-5D, Dodecanediperoxoic acid, mixture with sequestering agents 141178-64-5 141178-65-6  
RL: USES (Uses)  
(**disinfectant**)
- IT 127-09-3  
RL: USES (Uses)  
(buffers containing, in **disinfecting** composition of peroxy acids and sequestering agents)
- RN 127-09-3 HCAPLUS
- CN Acetic acid, sodium salt (7CI, 8CI, 9CI) (CA INDEX NAME)



● Na

- IT 66280-55-5D, Dodecanediperoxoic acid, mixture with sequestering agents  
RL: USES (Uses)  
(**disinfectant**)
- RN 66280-55-5 HCAPLUS
- CN Dodecanediperoxoic acid (9CI) (CA INDEX NAME)



L85 ANSWER 27 OF 53 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1991:526991 HCAPLUS  
 DN 115:126991  
 ED Entered STN: 05 Oct 1991  
 TI Noncontaminating antimicrobial composition  
 IN Schmidt, William  
 PA Ecolab, Inc., USA  
 SO Eur. Pat. Appl., 12 pp.  
 CODEN: EPXXDW  
 DT **Patent**  
 LA English  
 IC ICM A01N059-00  
 ICI A01N059-00, A01N037-36  
 CC 1-5 (Pharmacology)  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 423922	A1	19910424	EP 1990-307191	19900702 <--
	EP 423922	B1	19961211		
	R: AT, BE, DE, DK, FR, GB, IT, SE				
	AU 9057830	A1	19910426	AU 1990-57830	19900626 <--
	AU 623022	B2	19920430		
	GB 2236951	A1	19910424	GB 1990-14264	19900627 <--
	FI 97855	B	19961129	FI 1990-3231	19900627 <--
	FI 97855	C	19970310		
	AT 146036	E	19961215	AT 1990-307191	19900702 <--
	CA 2021631	AA	19910418	CA 1990-2021631	19900719 <--
	CA 2021631	C	19970930		
	US 5139788	A	19920818	US 1990-569237	19900817 <--
PRAI	US 1989-422778		19891017	<--	
AB	An antimicrobial surface sanitizing composition comprises a major portion of diluent and an active antimicrobial agent (e.g. 0.1-3% H2O2 and 0.25-3% C3-6 $\alpha$ -OH substituted mono- or di-carboxylic acid (e.g. lactic acid). The composition leaves a noncontaminating residue upon the surface after contact with the intended surface (e.g. a mammalian teat dip).				
ST	lactic acid hydrogen peroxide antimicrobial; hydroxycarboxylic acid hydrogen peroxide antimicrobial; carboxylate hydroxy hydrogen peroxide antimicrobial				
IT	Alcohols, biological studies RL: BIOL (Biological study) (carboxy, microbicides containing hydrogen peroxide and)				
IT	<b>Carboxylic acids</b> , biological studies RL: BIOL (Biological study) (di-, $\alpha$ -hydroxy substituted mono- or, microbicides containing hydrogen <b>peroxide</b> and)				
IT	Carboxylic acids, biological studies RL: BIOL (Biological study) (hydroxy, microbicides containing hydrogen peroxide and)				
IT	<b>Bactericides, Disinfectants, and Antiseptics</b> Fungicides and Fungistats (medical, lactic acid- and hydrogen peroxide-containing, noncontaminating residue)				
IT	50-21-5, Lactic acid, biological studies RL: BIOL (Biological study) (noncontaminating residue antimicrobial mixture containing hydrogen peroxide and)				
IT	7722-84-1, Hydrogen peroxide, biological studies RL: BIOL (Biological study) (noncontaminating residue antimicrobial mixture containing lactic acid and)				

L85 ANSWER 28 OF 53 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1991:474596 HCAPLUS

DN 115:74596  
 ED Entered STN: 23 Aug 1991  
 TI Manufacture of peroxoniobic acid sols  
 IN Terada, Yasuhiko; Uno, Hajime; Abe, Kazunobu; Shirasaki, Shinichi  
 PA Sakai Chemical Industry Co., Ltd., Sakai, Japan; National Institute for  
 Research in Inorganic Materials  
 SO Eur. Pat. Appl., 9 pp.  
 CODEN: EPXXDW  
 DT **Patent**  
 LA English  
 IC ICM C01B015-00  
 CC 49-2 (Industrial Inorganic Chemicals)  
 Section cross-reference(s): 57

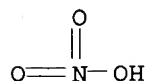
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 428388	A1	19910522	EP 1990-312386	19901113 <--
	EP 428388	B1	19950426		
	R: DE, FR, GB				
	JP 03153527	A2	19910701	JP 1989-294184	19891113 <--
	JP 08000701	B4	19960110		
	US 5102649	A	19920407	US 1990-611265	19901113 <--
PRAI	JP 1989-294184		19891113	<--	
AB	A strong acid, H <sub>2</sub> O <sub>2</sub> , and water are added to ≥1 Nb compds. selected from Nb hydroxide, Nb <sub>2</sub> O <sub>5</sub> , and NbCl <sub>5</sub> , to form an aqueous peroxoniobic acid solution, which is maintained at 5-50° to give the title sols. The <b>colloidal</b> peroxoniobic acid is suitable for use in the manufacture of Nb-containing ceramics and as a source of dispersed Nb. Thus, 1 mol concentrated				
	HCl was added to a dispersion of 0.2 mol Nb hydroxide in 300 mL water, then 0.8 mol H <sub>2</sub> O <sub>2</sub> was gradually added under stirring. Addnl. water was added to convert the Nb hydroxide to a peroxoniobic complex, and the mixture was held at 45° for 48 h to give the soluble After addition of 6N NH <sub>4</sub> OH to pH 1.5, the sol (particle size 0.02 μm) was subjected to ultrafiltration using polysulfone membranes to remove Cl ions.				
ST	niobium hydroxide peroxoniobic acid sol; hydrochloric acid niobium hydroxide; hydrogen peroxide hydrochloric acid; ultrafiltration <b>colloidal</b> peroxoniobic acid				
IT	<b>Carboxylic acids</b> , uses and miscellaneous				
	RL: USES (Uses)				
	(di-, stabilizers, in <b>colloidal peroxoniobic acid</b> )				
IT	Filtration				
	(ultra-, purification by, of <b>colloidal peroxoniobic acid</b> )				
IT	<b>1309-42-8P</b> , Magnesium hydroxide				
	RL: PREP (Preparation)				
	(colloidal, manufacture of, in magnesium niobium oxide ceramics manufacture)				
IT	7647-01-0, Hydrochloric acid, reactions 7697-37-2, Nitric acid, reactions				
	RL: RCT (Reactant); RACT (Reactant or reagent)				
	(concentrated, reaction of, with niobium compds., in presence of hydrogen peroxide, for <b>colloidal peroxoniobic acid</b> )				
IT	<b>10377-60-3</b> , Magnesium nitrate				
	RL: PROC (Process)				
	(ion exchange of, for <b>colloidal</b> magnesium hydroxide in magnesium niobium oxide ceramics manufacture)				
IT	39421-71-1, Duolite A-101D				
	RL: USES (Uses)				
	(ion exchange with, of magnesium nitrate, for <b>colloidal</b> magnesium hydroxide in magnesium niobium oxide ceramics manufacture)				
IT	<b>37349-30-7P</b> , Niobium hydroxide oxide				
	RL: PREP (Preparation)				

- (manufacture of **colloidal**, from niobium compds., by addition of strong acids and hydrogen peroxide and aging)
- IT 12163-26-7P, Magnesium niobium oxide (MgNb<sub>2</sub>O<sub>6</sub>)  
 RL: IMF (Industrial manufacture); PREP (Preparation)  
 (manufacture of, from **colloidal** magnesium hydroxide and peroxoniobic acid solns.)
- IT 12057-57-7P, Lead magnesium niobium oxide (PbMg<sub>0.33</sub>Nb<sub>0.67</sub>O<sub>3</sub>)  
 RL: IMF (Industrial manufacture); PREP (Preparation)  
 (manufacture of, from lead oxide and magnesium niobium oxide, **colloidal** peroxoniobic acid solution manufacture for)
- IT 1313-96-8, Niobium oxide 10026-12-7, Niobium pentachloride 12710-38-2, Niobium hydroxide  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reactions of, with strong acids and hydrogen peroxide, for **colloidal** peroxoniobic acid)
- IT 1335-25-7, Lead oxide  
 RL: USES (Uses)  
 (sintering of mixts. containing magnesium niobium oxide and, for lead magnesium niobium oxide, **colloidal** peroxoniobic acid solution manufacture for)
- IT 110-15-6, Succinic acid, uses and miscellaneous 141-82-2, Malonic acid, uses and miscellaneous 144-62-7, Oxalic acid, uses and miscellaneous  
 RL: USES (Uses)  
 (**stabilizer**, in **colloidal** peroxoniobic acid)
- IT 1309-42-8P, Magnesium hydroxide  
 RL: PREP (Preparation)  
 (**colloidal**, manufacture of, in magnesium niobium oxide ceramics manufacture)
- RN 1309-42-8 HCAPLUS  
 CN Magnesium hydroxide (Mg(OH)<sub>2</sub>) (9CI) (CA INDEX NAME)

HO—Mg—OH

- IT 10377-60-3, Magnesium nitrate  
 RL: PROC (Process)  
 (ion exchange of, for **colloidal** magnesium hydroxide in magnesium niobium oxide ceramics manufacture)
- RN 10377-60-3 HCAPLUS  
 CN Nitric acid, magnesium salt (8CI, 9CI) (CA INDEX NAME)



● 1/2 Mg

L85 ANSWER 29 OF 53 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1991:188024 HCAPLUS  
 DN 114:188024  
 ED Entered STN: 17 May 1991  
 TI Built or unbuilt aqueous detergent compositions for heavy duty fabric washing  
 IN Leng, Francis John; Machin, David; Reed, David Alan; Jones, David Alan Kenneth  
 PA Hindustan Lever Ltd., India  
 SO Indian, 34 pp.

CODEN: INXXAP

DT **Patent**  
 LA English  
 IC ICM C11D001-02  
 ICS C11D003-04; C11D003-39  
 CC 46-5 (Surface Active Agents and Detergents)  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	IN 166047	A	19900303	IN 1986-BO223	19860813 <--
PRAI	GB 1985-20550		19850816 <--		
OS	MARPAT 114:188024				

AB The title comps., comprising **stable** gels which are mainly or all in the liquid **crystal** form, contain 15-70% surfactant system, 1-45% additive, 20-55% water, and 0.001-10% enzyme, fluorescent whitener, bleach, photobleach, antiredeposition agent, perfume, and/or germicide. The surfactant system has a Krafft point below ambient temperature, does not spontaneously form the hexagonal phase, and comprises 30-100% surfactant having >1 aliphatic or araliph. hydrocarbon chain containing >8 C and having an anionic group position non-terminally in a hydrocarbon chain or carrying >1 hydrocarbon chain and 0-70% other anionic or nonionic surfactant. The additive is a water-soluble anionic or nonionic material (e.g., urea) which has little or no micelle forming capability and is capable of forcing the surfactant system into the hexagonal phase. A composition contained Na alkylbenzenesulfonate 40, urea 20, boric acid 1, **Na2SO4** 1, fluorescent whitener 0.1, and water 37.9%.

ST laundry detergent gel liq **crystal**; urea detergent gel liq **crystal**; fluorescent whitener detergent gel; bleach detergent gel; enzyme detergent gel; photobleach detergent gel; antiredeposition agent detergent gel; perfume detergent gel; germicide detergent gel; hexagonal liq **crystal** detergent gel

IT Bleaching agents  
 Fluorescent brighteners  
 (laundry detergent gels containing, in liquid **crystal** form)

IT Soilproofing  
 (agents, laundry detergent gels containing, in liquid **crystal** form)

IT Liquid **crystals**  
 (hexagonal, laundry detergent gels in form of, manufacture of)

IT Detergents  
 (laundry, liquid, manufacture of heavy duty, in liquid **crystal** form)

IT **9004-32-4**, CM-cellulose sodium salt  
 RL: USES (Uses)  
 (antiredeposition agents, detergent gels containing, in liquid **crystal** form)

IT **66280-55-5**, Diperoxydodecanedioic acid  
 RL: USES (Uses)  
 (bleaching agents, detergent gels containing, in liquid **crystal** form)

IT 27344-41-8, Tinopal CBS X  
 RL: USES (Uses)  
 (fluorescent whiteners, detergent gels containing, in liquid **crystal** form)

IT 57-13-6, Urea, uses and miscellaneous 9014-01-1, Subtilisin  
 RL: USES (Uses)  
 (laundry detergent gels containing, in liquid **crystal** form)

IT 47822-79-7D, sulfonated  
 RL: USES (Uses)  
 (photochem. bleach, detergent gels containing, in liquid **crystal** form)

IT **9004-32-4**, CM-cellulose sodium salt  
 RL: USES (Uses)  
 (antiredeposition agents, detergent gels containing, in liquid **crystal** form)

RN 9004-32-4 HCAPLUS  
 CN Cellulose, carboxymethyl ether, sodium salt (8CI, 9CI) (CA INDEX NAME)

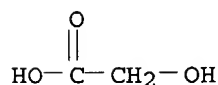
CM 1

CRN 9004-34-6  
 CMF Unspecified  
 CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

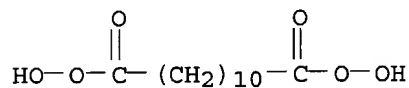
CM 2

CRN 79-14-1  
 CMF C2 H4 O3



IT **66280-55-5**, Diperoxydodecanedioic acid  
 RL: USES (Uses)  
 (bleaching agents, detergent gels containing, in liquid **crystal** form)

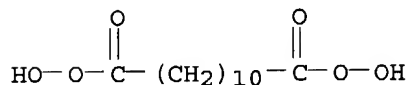
RN 66280-55-5 HCAPLUS  
 CN Dodecanediperoxoic acid (9CI) (CA INDEX NAME)



L85 ANSWER 30 OF 53 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1991:104823 HCAPLUS  
 DN 114:104823  
 ED Entered STN: 23 Mar 1991  
 TI Agglomerated peroxy acid bleach granules and process for making same  
 IN Kellner, Charles Edward; Alexander, Steven Robert  
 PA Procter and Gamble Co., USA  
 SO Eur. Pat. Appl., 11 pp.  
 CODEN: EPXXDW  
 DT **Patent**  
 LA English  
 IC ICM C11D003-39  
 CC 46-5 (Surface Active Agents and Detergents)  
 FAN.CNT 1

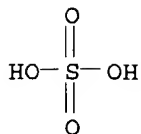
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 396341	A2	19901107	EP 1990-304584	19900426 <--
	EP 396341	A3	19920122		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	CA 2015490	AA	19901101	CA 1990-2015490	19900426 <--
	AU 9054549	A1	19901101	AU 1990-54549	19900430 <--
	AU 643206	B2	19931111		
	CN 1046932	A	19901114	CN 1990-102598	19900501 <--
	JP 03000800	A2	19910107	JP 1990-115716	19900501 <--
	BR 9002050	A	19910813	BR 1990-2050	19900502 <--
PRAI	US 1989-345495		19890501	<--	
OS	MARPAT 114:104823				

- AB Dry granules having good uniformity, useful for addition to water in the preparation of bleaching solns. for fabrics, are prepared by continuously mixing a pumpable slurry containing 26-55% water and an **exotherm** control agent with a dry particulate mixture containing recycled dry bleach fines, **powdered exotherm** control agent, and fillers to form granules having free water content 10-20% and drying the granules at a controlled temperature in a fluidized-bed dryer to give free water content <0.5%. Spraying 0.93 part slurry of diperoxydodecanedioic acid (I) 22.9, water 46, boric acid 25.2, and surfactant paste-additives 5.9% on a dry mixture of 0.35 part **Na2SO4** and 2.95% recycled dry I fines and drying the resulting granules in a fluidized-bed dryer with air at  $\approx 65^\circ$  gave granules (90% having particle size 250-750  $\mu\text{m}$ ) containing  $\approx 25\%$  I.
- ST peroxy acid bleach granulation; peroxydodecanedioic bleach granulation; diperoxydodecanedioic bleach granulation
- IT Granulation  
(of peroxy acid bleach, with **exotherm** control agent)
- IT Bleaching agents  
(peroxy acids, granulation of, with **exotherm** control agent)
- IT **66280-55-5**, Diperoxydodecanedioic acid  
RL: USES (Uses)  
(bleaching agents, granulation of, with **exotherm** control agent)
- IT 110-16-7, Maleic acid, uses and miscellaneous 557-39-1, Magnesium formate 814-80-2, Calcium lactate 6915-15-7, Malic acid 7487-88-9, **Magnesium sulfate**, uses and miscellaneous 7757-82-6, **Sodium sulfate**, uses and miscellaneous 7778-18-9, Calcium sulfate 10024-42-7, Aluminum **sodium sulfate** 10043-01-3, Aluminum sulfate 10043-35-3, Boric acid, uses and miscellaneous 15007-61-1, Aluminum potassium sulfate 15710-63-1, Aluminum ammonium sulfate 15892-81-6  
RL: USES (Uses)  
(**exotherm** control agent, in granulation of peroxy acid bleach)
- IT **66280-55-5**, Diperoxydodecanedioic acid  
RL: USES (Uses)  
(bleaching agents, granulation of, with **exotherm** control agent)
- RN 66280-55-5 HCAPLUS
- CN Dodecanediperoxoic acid (9CI) (CA INDEX NAME)



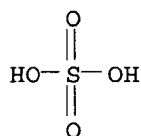
- IT 7487-88-9, **Magnesium sulfate**, uses and miscellaneous 7757-82-6, **Sodium sulfate**, uses and miscellaneous 7778-18-9, Calcium sulfate  
RL: USES (Uses)  
(**exotherm** control agent, in granulation of peroxy acid bleach)
- RN 7487-88-9 HCAPLUS
- CN Sulfuric acid magnesium salt (1:1) (8CI, 9CI) (CA INDEX NAME)





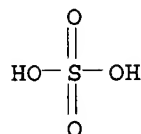
● Mg

RN 7757-82-6 HCAPLUS  
 CN Sulfuric acid disodium salt (8CI, 9CI) (CA INDEX NAME)



●2 Na

RN 7778-18-9 HCAPLUS  
 CN Sulfuric acid, calcium salt (1:1) (8CI, 9CI) (CA INDEX NAME)



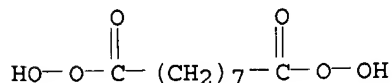
● Ca

L85 ANSWER 31 OF 53 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1991:8592 HCAPLUS  
 DN 114:8592  
 ED Entered STN: 12 Jan 1991  
 TI Simplified preparation of bleaching granules from peroxy acid and  
 hydratable inorganic material  
 IN Ploumen, Jan Joseph Hubert; Edelij, Herman Johannes; Reijnen, Jan  
 Josephus Maria  
 PA AKZO N. V., Neth.  
 SO Eur. Pat. Appl., 9 pp.  
 CODEN: EPXXDW  
 DT **Patent**  
 LA English  
 IC ICM C11D003-395  
 CC 46-5 (Surface Active Agents and Detergents)  
 FAN.CNT 2

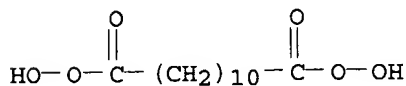
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	---	----	-----	-----
PI	EP 376360	A1	19900704	EP 1989-202929	19891120 <--
	EP 376360	B1	19950322		

R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE

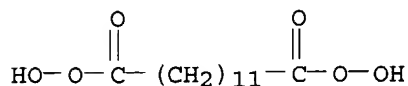
AT 120231 E 19950415 AT 1989-202929 19891120 <--  
 ES 2069575 T3 19950516 ES 1989-202929 19891120 <--  
 CA 2003807 AA 19900525 CA 1989-2003807 19891124 <--  
 NO 8904689 A 19900528 NO 1989-4689 19891124 <--  
 NO 174062 B 19931129  
 NO 174062 C 19940309  
 BR 8905960 A 19900619 BR 1989-5960 19891127 <--  
 JP 02238099 A2 19900920 JP 1989-304967 19891127 <--  
 PRAI EP 1988-202691 19881125 <--  
 AB Free-flowing granules are prepared by mixing  $\geq 1$  water-insol. peroxy acid bleach (e.g., diperoxydodecanedioic acid) and a hydratable inorg. material (e.g., **Na2SO4**) at a water content below the maximum hydration water content of the inorg. material and below the hydration temperature of the inorg. material until a **powder** forms, increasing the temperature to at least the hydration temperature of the inorg. material, forming the **powder** into granules, and, optionally, drying the granules. The granules have a mole water content and are mech. and chemical **stable**, dust-free, soluble in water, and useful in laundering.  
 ST peroxy acid bleach granulation; **sodium sulfate** granulation bleach; laundry bleach peracid granulation  
 IT Granulation (of peroxy acid bleach, with hydratable inorg. compds.)  
 IT Bleaching agents (peroxy acids, granulation of, with hydratable inorg. compds.)  
 IT Carboxylic acids, uses and miscellaneous  
 RL: USES (Uses) (peroxy, bleaching agents, granulation of, with hydratable inorg. compds.)  
 IT 1941-79-3, **Nonanediperoxoic acid** 66280-55-5, Diperoxydodecanedioic acid 68575-79-1, Diperoxytridecanedioic acid 104788-63-8 104788-71-8 104788-72-9 111875-82-2 128275-31-0  
 RL: USES (Uses) (bleaching agents, granulation of, with hydratable inorg. compds.)  
 IT 7757-82-6, **Sodium sulfate**, uses and miscellaneous  
 RL: USES (Uses) (granulation of peroxy acid bleach with hydratable)  
 IT 1941-79-3, **Nonanediperoxoic acid** 66280-55-5, Diperoxydodecanedioic acid 68575-79-1, Diperoxytridecanedioic acid  
 RL: USES (Uses) (bleaching agents, granulation of, with hydratable inorg. compds.)  
 RN 1941-79-3 HCAPLUS  
 CN Nonanediperoxoic acid (9CI) (CA INDEX NAME)



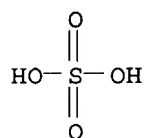
RN 66280-55-5 HCAPLUS  
 CN Dodecanediperoxoic acid (9CI) (CA INDEX NAME)



RN 68575-79-1 HCAPLUS  
 CN Tridecanediperoxoic acid (9CI) (CA INDEX NAME)



IT 7757-82-6, Sodium sulfate, uses and  
 miscellaneous  
 RL: USES (Uses)  
 (granulation of peroxy acid bleach with hydratable)  
 RN 7757-82-6 HCAPLUS  
 CN Sulfuric acid disodium salt (8CI, 9CI) (CA INDEX NAME)



●2 Na

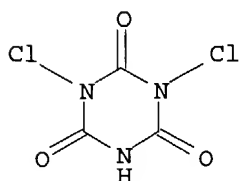
L85 ANSWER 32 OF 53 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1990:426014 HCAPLUS  
 DN 113:26014  
 ED Entered STN: 21 Jul 1990  
 TI Wax-encapsulated detergent actives and emulsion process for their  
 production  
 IN Hurckes, Lisa C.; Kamel, Ahmed Abdel Moneim; Morelli, Monica A.  
 PA Unilever PLC, UK; Unilever N. V.  
 SO Eur. Pat. Appl., 22 pp.  
 CODEN: EPXXDW

DT Patent  
 LA English  
 IC ICM C11D017-00  
 ICS C11D003-39; C11D003-395; B01J013-02  
 CC 46-6 (Surface Active Agents and Detergents)  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 346034	A2	19891213	EP 1989-305628	19890605 <--
	EP 346034	A3	19901017		
	EP 346034	B1	19940406		
	R: CH, DE, ES, FR, GB, IT, LI, NL, SE				
	US 4919841	A	19900424	US 1988-202853	19880606 <--
	AU 8936005	A1	19891207	AU 1989-36005	19890601 <--
	AU 623143	B2	19920507		
	BR 8902601	A	19900123	BR 1989-2601	19890605 <--
	ES 2051358	T3	19940616	ES 1989-305628	19890605 <--
	JP 02035935	A2	19900206	JP 1989-143927	19890606 <--
	ZA 8904273	A	19910227	ZA 1989-4273	19890606 <--
PRAI	US 1988-202853		19880606 <--		

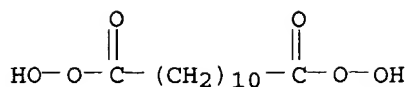
AB A particulate detergent-active material, such as a bleaching agent or nonionic surfactant, is dispersed in a molten wax, and the dispersion is emulsified in an aqueous surfactant solution and cooled to give an encapsulated material which is protected with interaction with other components of

- detergent compns., e.g., thickened automatic dishwashing liqs. Blends of hard and soft waxes are especially useful for encapsulation.
- ST wax encapsulation detergent component; bleach encapsulation wax **stability**; nonionic surfactant encapsulation wax; dishwasher detergent component encapsulation; cleaner component encapsulation wax
- IT Detergents  
(encapsulation of components of, by wax, for **stability**)
- IT Bleaching agents  
(encapsulation of, by wax, for **stability** in detergents)
- IT Encapsulation  
(of detergent components, by wax, for **stability**)
- IT Alcohols, compounds  
RL: PROC (Process)  
(C12-15, ethoxylated propoxylated, encapsulation of, by wax, for **stability** in detergents)
- IT Alcohols, compounds  
RL: PROC (Process)  
(C13-14-secondary, ethoxylated propoxylated, encapsulation of, by wax, for **stability** in detergents)
- IT Detergents  
(dishwashing, liquid, encapsulation of components of, by wax, for **stability**)
- IT Paraffin waxes and Hydrocarbon waxes, uses and miscellaneous  
RL: USES (Uses)  
(**microcryst.**, encapsulation by, of detergent actives, for **stability**)
- IT 10543-57-4, N,N,N',N'-Tetraacetythylenediamine 91125-43-8  
RL: USES (Uses)  
(bleach activators, wax-encapsulated, **stable**)
- IT 118-52-5, 1,3-Dichloro-5,5-dimethylhydantoin 2244-21-5, Potassium dichloroisocyanurate 2893-78-9, ACL 60 10332-33-9, Sodium perborate monohydrate 37244-98-7 66280-55-5, Diperoxydodecanedioic acid  
RL: USES (Uses)  
(bleaching agents, encapsulation of, by wax, for **stability**)
- IT 110-27-0, Isopropylmyristate 9002-88-4, Polyethylene 117925-29-8, Epolene C16  
RL: USES (Uses)  
(wax, encapsulation by, of detergent actives, for **stability**)
- IT 2893-78-9, ACL 60 66280-55-5, Diperoxydodecanedioic acid  
RL: USES (Uses)  
(bleaching agents, encapsulation of, by wax, for **stability**)
- RN 2893-78-9 HCAPLUS
- CN 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3-dichloro-, sodium salt (9CI)  
(CA INDEX NAME)



● Na

- RN 66280-55-5 HCAPLUS
- CN Dodecanediperoxoic acid (9CI) (CA INDEX NAME)



L85 ANSWER 33 OF 53 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1990:425992 HCAPLUS  
 DN 113:25992  
 ED Entered STN: 21 Jul 1990  
 TI Preparation of desensitized water-insoluble diperoxy dicarboxylic acid-containing bleaching agents  
 IN Zimmermann, Frank; Jostmann, Thomas; Schueller, Hans Peter; Engel, Klaus  
 PA Huels A.-G., Germany  
 SO Ger. Offen., 14 pp.  
 CODEN: GWXXBX  
 DT **Patent**  
 LA German  
 IC ICM C07C407-00  
 ICS C07C409-00; D06L003-02; C11D003-39  
 CC 46-5 (Surface Active Agents and Detergents)  
 Section cross-reference(s): 23

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3822798	A1	19900111	DE 1988-3822798	19880706 <--
	EP 375829	A2	19900704	EP 1989-108288	19890509 <--
	EP 375829	A3	19901024		
	R: AT, BE, CH, DE, ES, FR, GB, IT, LI, LU, NL, SE				
	US 5030381	A	19910709	US 1989-360401	19890602 <--
	JP 02255899	A2	19901016	JP 1989-173168	19890706 <--
PRAI	DE 1988-3822798		19880706	<--	

AB The title agents, useful in detergents, comprise granulated mixts. of **Na2SO4** and a diperoxy dicarboxylic acid, such as diperoxydodecanedioic acid or diperoxybrassylic acid, which have good chemical **stability** in spite of a high impurity (e.g., heavy metal and Cl) content, good handling properties, low bulk d., and high abrasion resistance. The agents are prepared by filtering the freshly prepared products of the peroxidn. of a water-insol. dicarboxylic acid by H2O2 in the presence of H2SO4 to give a filtrate containing H2SO4 and a liquid suspension containing the diperoxy dicarboxylic acid and <10% H2SO4, neutralizing the filtrate and removing water to give **powder Na2SO4**, neutralizing the liquid suspension and adding a water-soluble organic polymer to remove heavy metals and Cl-, and mixing the resulting diperoxy dicarboxylic acid with the **powdered Na2SO4** to form granules.

ST peroxy dicarboxylic bleach desensitization; dicarboxylic diperoxy bleach desensitization; safety diperoxy dicarboxylic bleach; **sodium sulfate** diperoxide desensitization; sulfate diperoxy dicarboxylic desensitization; granulation diperoxy dicarboxylic desensitization; diperoxydodecanedioic acid prepn desensitization; diperoxybrassylic acid prepn desensitization

IT Detergents

(bleaching agents for, granulated diperoxy dicarboxylic acids as, manufacture of)

IT Bleaching agents

(diperoxy dicarboxylic acid, manufacture of granulated, desensitization in)

IT Explosion

(prevention of, of diperoxy dicarboxylic acids, in manufacture of granules)

IT 7757-82-6, **Sodium sulfate**, uses and

miscellaneous

RL: USES (Uses)

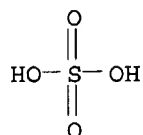
(diperoxy dicarboxylic acid granules containing, for desensitization, manufacture of)

IT 66280-55-5P, Diperoxydodecanedioic acid 68575-79-1P, Tridecanediperoxoic acid  
 RL: PREP (Preparation)  
 (manufacture of granulated, as bleaching agent, desensitization in)

IT 7757-82-6, Sodium sulfate, uses and miscellaneous  
 RL: USES (Uses)  
 (diperoxy dicarboxylic acid granules containing, for desensitization, manufacture of)

RN 7757-82-6 HCAPLUS

CN Sulfuric acid disodium salt (8CI, 9CI) (CA INDEX NAME)

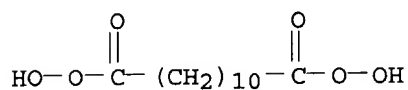


●2 Na

IT 66280-55-5P, Diperoxydodecanedioic acid 68575-79-1P, Tridecanediperoxoic acid  
 RL: PREP (Preparation)  
 (manufacture of granulated, as bleaching agent, desensitization in)

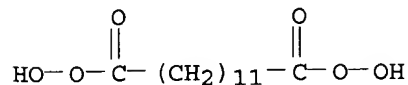
RN 66280-55-5 HCAPLUS

CN Dodecanediperoxoic acid (9CI) (CA INDEX NAME)



RN 68575-79-1 HCAPLUS

CN Tridecanediperoxoic acid (9CI) (CA INDEX NAME)



L85 ANSWER 34 OF 53 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1990:80009 HCAPLUS

DN 112:80009

ED Entered STN: 03 Mar 1990

TI Preparation of granules containing peroxy acid for use in bleach and detergent compositions

IN Finch, Timothy David; Iley, William John

PA Unilever N. V., Neth.; Unilever PLC

SO Eur. Pat. Appl., 6 pp.  
 CODEN: EPXXDW

DT Patent

LA English

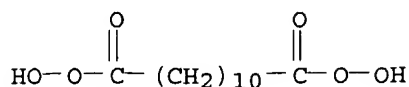
IC ICM C11D011-00

ICS C11D003-39; C11D003-36

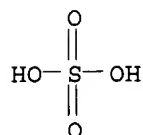
## CC 46-5 (Surface Active Agents and Detergents)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 340847	A2	19891108	EP 1989-201076	19890426 <--
	EP 340847	A3	19901003		
	R: CH, DE, ES, FR, GB, IT, LI, NL, SE				
	AU 8933931	A1	19891109	AU 1989-33931	19890502 <--
	AU 613745	B2	19910808		
	JP 02011564	A2	19900116	JP 1989-113614	19890502 <--
	JP 06023186	B4	19940330		
	BR 8902095	A	19891205	BR 1989-2095	19890504 <--
	ZA 8903330	A	19910130	ZA 1989-3330	19890505 <--
PRAI	GB 1988-10630		19880505 <--		
AB	A water-wet mixture of a solid peroxy acid and a hydratable material (especially <b>Na2SO4</b> ) having temperature of hydration $\leq 40^\circ$ is prepared at a temperature above the hydration temperature with the incorporation of a film-forming material (especially a carboxy-containing polymer) to give a mixture having pH <7, the mixture is formed into granules before, during, or after cooling to a temperature below the hydration temperature, and the granules are dried. The granules have good homogeneity, storage <b>stability</b> , attrition resistance, and dispersibility and are useful in <b>powdered</b> bleaching or detergent compns. A suspension containing diperoxydodecanedioic acid (I) 28, <b>Na2SO4</b> 7, and water 65% was mixed at $40^\circ$ with 0.25 part <b>Na2SO4</b> /part I, mixed at $40^\circ$ with sufficient poly(acrylic acid) (II; mol. weight 30,000) to give a 5% concentration in the final granules, and cooled to $10^\circ$ in a mixer to give granules which were dried in a fluidizing apparatus and screened to recover granules having diameter 150-2000 $\mu$ m. The granules contained I 19, <b>Na2SO4</b> 76, and II 5% and had bulk d. 600 kg/m <sup>3</sup> .				
ST	peroxy acid bleach granulation; <b>sodium sulfate</b> granulation peroxy acid; polyacrylic acid granulation bleach; carboxy polymer granulation bleach; diperoxydodecanedioic acid granulation				
IT	Granulation (of peroxy acid bleach, with hydratable and film-forming materials)				
IT	Detergents (peroxy acid bleach-containing granules for addition to, manufacture of)				
IT	Bleaching agents (peroxy acids, granulation of, with hydratable and film-forming materials)				
IT	<b>66280-55-5</b> , Diperoxydodecanedioic acid RL: USES (Uses) (bleaching agents, granulation of, with hydratable and film-forming materials)				
IT	<b>7757-82-6</b> , <b>Sodium sulfate</b> , uses and miscellaneous 9003-01-4, Poly(acrylic acid) RL: USES (Uses) (in granulation of peroxy acid bleach, for detergents)				
IT	<b>66280-55-5</b> , Diperoxydodecanedioic acid RL: USES (Uses) (bleaching agents, granulation of, with hydratable and film-forming materials)				
RN	<b>66280-55-5</b> HCAPLUS				
CN	Dodecanediperoxoic acid (9CI) (CA INDEX NAME)				



IT 7757-82-6, Sodium sulfate, uses and  
 miscellaneous  
 RL: USES (Uses)  
 (in granulation of peroxy acid bleach, for detergents)  
 RN 7757-82-6 HCAPLUS  
 CN Sulfuric acid disodium salt (8CI, 9CI) (CA INDEX NAME)



●2 Na

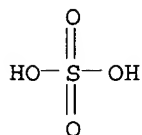
L85 ANSWER 35 OF 53 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1990:38777 HCAPLUS  
 DN 112:38777  
 ED Entered STN: 04 Feb 1990  
 TI Aqueous bleach compositions containing a **stably** suspended  
 organic peroxy acid  
 IN Emmons, Stuart Albert; Hale, Perry  
 PA Unilever N. V., Neth.; Unilever PLC  
 SO Eur. Pat. Appl., 5 pp.  
 CODEN: EPXXDW  
 DT **Patent**  
 LA English  
 IC ICM C11D003-395  
 ICS C11D001-83  
 CC 46-6 (Surface Active Agents and Detergents)  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 337516	A2	19891018	EP 1989-200347	19890214 <--
	EP 337516	A3	19900530		
	R: CH, DE, ES, FR, GB, IT, LI, NL, SE				
	NO 8900503	A	19890922	NO 1989-503	19890207 <--
	NO 173948	B	19931115		
	NO 173948	C	19940223		
	ZA 8900976	A	19901031	ZA 1989-976	19890208 <--
	AU 8929812	A1	19890921	AU 1989-29812	19890209 <--
	AU 597522	B2	19900531		
	CA 1328715	A1	19940426	CA 1989-590784	19890210 <--
	US 4929377	A	19900529	US 1989-313408	19890221 <--
	BR 8900970	A	19891024	BR 1989-970	19890302 <--
	JP 03020399	A2	19910129	JP 1989-69122	19890320 <--
	JP 05031917	B4	19930513		
PRAI	GB 1988-6704		19880321		<--
OS	MARPAT 112:38777				

AB The title compns., useful for cleaning hard surfaces, etc., contain a particulate organic peroxy acid such as diperoxydodecanedioic acid (I) which is **stably** suspended by a structuring combination of a secondary

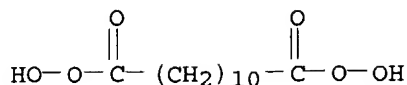


C10-20 alkanesulfonate, and ethoxylated fatty alc., and **Na2SO4**.  
 A composition containing I 10.0, secondary C13-17 alkanesulfonate 5.1,  
 Synperonic  
 A3 0.9, **Na2SO4** 10.0, ethylenediaminetetrakis(methylenephosphonic  
 acid 0.04, and water .apprx.74% and having pH 4.5 was pourable and had  
 good chemical and phys. **stability** during storage.  
 ST bleach liq suspension **stability**; diperoxydodecanedioic bleach  
 liq suspension; peroxy acid bleach liq; alkanesulfonate liq bleach  
**stability**; ethoxylate liq bleach **stability**; alc  
 ethoxylate liq bleach; **sodium sulfate** liq bleach  
 IT Thickening agents  
 (alumina, **colloidal**, for aqueous cleaners for hard surfaces)  
 IT Bleaching agents  
 (liquid, **stable**, particulate peroxy acid-containing)  
 IT Bleaching agents  
 (peroxy acids, aqueous liquid suspensions containing, **stable**)  
 IT Alcohols, compounds  
 RL: USES (Uses)  
 (C13-17, ethoxylated, bleach compns. containing particulate peroxy acid  
 and, liquid, **stable**)  
 IT Detergents  
 (cleaning compns., liquid, **colloidal** alumina-thickened, for  
 hard surfaces)  
 IT **7757-82-6, Disodium sulfate**, uses and  
 miscellaneous  
 RL: USES (Uses)  
 (bleach compns. containing particulate peroxy acid and, liquid,  
**stable**)  
 IT **66280-55-5, Diperoxydodecanedioic acid**  
 RL: USES (Uses)  
 (bleaching compns. containing, liquid, **stable**)  
 IT 5989-27-5, D-Limonene  
 RL: USES (Uses)  
 (cleaners containing, alumina-thickened, for hard surfaces)  
 IT **7757-82-6, Disodium sulfate**, uses and  
 miscellaneous  
 RL: USES (Uses)  
 (bleach compns. containing particulate peroxy acid and, liquid,  
**stable**)  
 RN **7757-82-6 HCAPLUS**  
 CN Sulfuric acid disodium salt (8CI, 9CI) (CA INDEX NAME)



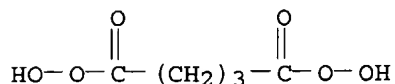
●2 Na

IT **66280-55-5, Diperoxydodecanedioic acid**  
 RL: USES (Uses)  
 (bleaching compns. containing, liquid, **stable**)  
 RN **66280-55-5 HCAPLUS**  
 CN Dodecanediperoxoic acid (9CI) (CA INDEX NAME)



- L85 ANSWER 36 OF 53 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1989:520802 HCAPLUS  
 DN 111:120802  
 ED Entered STN: 01 Oct 1989  
 TI Problems in the **disinfection** of dental impression materials  
 AU Borneff, Marianne; Fuhr, Klaus; Behneke, Nikolaus  
 CS Hyg.-Inst., Univ. Heidelberg, Heidelberg, D-6900, Fed. Rep. Ger.  
 SO Zentralblatt fuer Bakteriologie, Mikrobiologie und Hygiene, Serie B: Umwelthygiene, Krankenhaushygiene, Arbeitshygiene, Praeventive Medizin (1989), 187(4/6), 365-81  
 CODEN: ZBMMEA; ISSN: 0932-6073  
 DT Journal  
 LA German  
 CC 63-7 (Pharmaceuticals)  
 AB Com. products containing glutaryl- and succinyldialdehydes and peracetic and **perglutaric acids** were tested for their suitability in the bacterial **disinfection** of dental impression materials (alginates and elastomers), both in model studies with Staphylococcus aureus and in practical trials, whereby effects on impression material properties were also considered. In general, **disinfection** within the guidelines of the German Society of Hygiene and Microbiol. (DGHM) was possible, although a pronounced influence of product formulation (no data) and impression material was observed Further impression material roughness was influenced to various extents, depending upon both **disinfectant** and material employed. A general statement of **disinfection** suitability was therefore not possible.  
 ST dental impression material **disinfection** com **disinfectant**  
 IT Rubber, silicone, biological studies  
 Rubber, urethane, biological studies  
 Siloxanes and Silicones, biological studies  
 RL: PROC (Process)  
 (disinfection of)  
 IT **Bactericides, Disinfectants, and Antiseptics**  
 (for dental impression materials)  
 IT **Sterilization and Disinfection**  
 (of dental impression materials, with com. **disinfectants**)  
 IT Dental materials and appliances  
 (impressions, **disinfection** of, with com. **disinfectants**, surface roughness changes in)  
 IT Rubber, synthetic  
 RL: PROC (Process)  
 (polyether, **disinfection** of)  
 IT Surface structure  
 (roughness, of dental impression materials, **disinfectants** effect on)  
 IT 79-21-0, Peracetic acid 111-30-8, Pentanedial 638-37-9, Butanedial **28317-46-6, Perglutaric acid**  
 RL: BIOL (Biological study)  
 (dental impression material **disinfection** by)  
 IT 109319-34-8, Alginoplast  
 RL: PROC (Process)  
 (disinfection of)  
 IT **28317-46-6, Perglutaric acid**  
 RL: BIOL (Biological study)  
 (dental impression material **disinfection** by)

RN 28317-46-6 HCAPLUS  
 CN Pentanediperoxoic acid (9CI) (CA INDEX NAME)

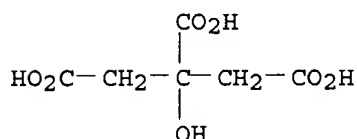


L85 ANSWER 37 OF 53 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1989:517340 HCAPLUS  
 DN 111:117340  
 ED Entered STN: 01 Oct 1989  
 TI Non-phosphorus laundry detergent compositions containing zeolite builder and peroxy acid bleach  
 IN Emery, William Derek; Barnes, Stephen George; Sims, Peter Stanford  
 PA Unilever N. V., Neth.; Unilever PLC  
 SO Eur. Pat. Appl., 9 pp.  
 CODEN: EPXXDW  
 DT Patent  
 LA English  
 IC ICM C11D003-395  
 ICS C11D003-12; C11D003-20  
 CC 46-5 (Surface Active Agents and Detergents)  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 313143	A2	19890426	EP 1988-202243	19881007 <--
	EP 313143	A3	19891018		
	R: CH, DE, ES, FR, GB, IT, LI, NL, SE				
	AU 8824008	A1	19890427	AU 1988-24008	19881019 <--
	AU 607268	B2	19910228		
	NO 8804699	A	19890424	NO 1988-4699	19881021 <--
	JP 01146996	A2	19890608	JP 1988-265911	19881021 <--
	BR 8805449	A	19890627	BR 1988-5449	19881021 <--
PRAI	GB 1987-24899		19871023	<--	

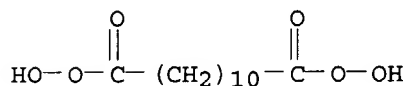
OS MARPAT 111:117340  
 AB Citric acid or an alkali metal citrate improves the cleaning and bleaching performance of the title compns. A spray-dried **powder** containing Na alkylbenzenesulfonate 9.0, ethoxylated (7 mol) fatty alc. 1.5, Sokalan CP5 4.0, zeolite A 24.0, **Na2SO4** 0.3, CM-cellulose 0.5, EDTA Na salt 0.2, Na2CO3 2.0, and water-fluorescent brightener 7.6 parts was mixed with a particulate mixture of Na perborate monohydrate 8.0, antifoaming agent 2.5, Savinase 0.5, diperoxydodecanedioic acid 6.0, and **Na2SO4** 33.9 parts to give a detergent which was used with 5% tri-Na citrate (I) in the laundering of fabrics stained with tea and red wine, giving better cleaning and bleaching than a composition containing no I.  
 ST citrate peroxy acid bleaching; peroxy acid bleaching laundering; peroxydodecanedioic bleaching laundering; zeolite laundry detergent bleaching; citric acid peroxide bleaching  
 IT Bleaching agents  
 (peroxy acids, in laundry detergents, activators for)  
 IT Zeolites, uses and miscellaneous  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (A, detergents containing, for laundering, activators for peroxy acid bleach in)  
 IT Detergents  
 (laundry, zeolite-built, activators for peroxy acid bleach in)  
 IT **68-04-2**, Trisodium citrate 77-92-9, Citric acid, uses and miscellaneous  
 RL: CAT (Catalyst use); USES (Uses)  
 (activators, for peroxy acid bleach in laundry detergents)

IT 66280-55-5, Diperoxydodecanedioic acid  
 RL: USES (Uses)  
 (bleaching agents, in laundry detergents, activators for)  
 IT 1335-30-4  
 RL: USES (Uses)  
 (zeolites, A, detergents containing, for laundering, activators for peroxy acid bleach in)  
 IT 68-04-2, Trisodium citrate  
 RL: CAT (Catalyst use); USES (Uses)  
 (activators, for peroxy acid bleach in laundry detergents)  
 RN 68-04-2 HCAPLUS  
 CN 1,2,3-Propanetricarboxylic acid, 2-hydroxy-, trisodium salt (9CI) (CA INDEX NAME)



●3 Na

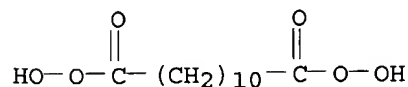
IT 66280-55-5, Diperoxydodecanedioic acid  
 RL: USES (Uses)  
 (bleaching agents, in laundry detergents, activators for)  
 RN 66280-55-5 HCAPLUS  
 CN Dodecanediperoxoic acid (9CI) (CA INDEX NAME)



L85 ANSWER 38 OF 53 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1989:499427 HCAPLUS  
 DN 111:99427  
 ED Entered STN: 16 Sep 1989  
 TI Phosphate-free aluminosilicate-built detergents containing a peroxy acid and a polyphosphonate for effective bleaching during laundering  
 IN Emery, William Derek; Barnes, Stephen George; Sims, Peter Stanford  
 PA Unilever N. V., Neth.; Unilever PLC  
 SO Eur. Pat. Appl., 8 pp.  
 CODEN: EPXXDW  
 DT **Patent**  
 LA English  
 IC ICM C11D003-395  
 ICS C11D003-12; C11D003-36  
 CC 46-5 (Surface Active Agents and Detergents)  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 313145	A2	19890426	EP 1988-202245	19881007 <--
	EP 313145	A3	19891018		
	R: CH, DE, ES, FR, GB, IT, LI, NL, SE				
	AU 8824006	A1	19890427	AU 1988-24006	19881019 <--
	NO 8804701	A	19890424	NO 1988-4701	19881021 <--
	JP 01161098	A2	19890623	JP 1988-265913	19881021 <--

BR 8805451 A 19890627 BR 1988-5451 19881021 <--  
 PRAI GB 1987-24901 19871023 <--  
 OS MARPAT 111:99427  
 AB A phosphonate R2N(CH2CH2NR)mR (R = CH2PO3H2; m = 0-2), optionally in the form of a water-soluble salt, improves the cleaning and bleaching performance of the title detergents at ≤40°. A spray-dried **powder** containing Na alkylbenzenesulfonate 9.0, ethoxylated (7 mol) fatty alc. 1.5, Sokalan CP5 4.0, zeolite A 24.0, **Na2SO4** 0.3, CM-cellulose 0.5, EDTA Na salt 0.2, Na2CO3 2.0, and water-fluorescent brightener 7.6 parts was mixed with a particulate mixture of Na perborate monohydrate 8.0, antifoaming agent 2.5, Savinase 0.5, diperoxododecanedioic acid 6.0, and **Na2SO4** 33.9 parts to give a detergent which was used with 1% tri-Ca complex of [CH2N(CH2PO3H2)2]2 (I) in the laundering of fabrics containing tea, red wine, and protein stains giving better cleaning and bleaching than a composition containing no I.  
 ST phosphonate peroxy acid bleaching; peroxy acid bleaching laundering; amine phosphonomethyl bleaching peroxy acid; zeolite laundry detergent bleaching; peroxydodecanedioic bleaching laundry detergent  
 IT Bleaching agents  
 (peroxy acids, in laundry detergents containing zeolites, activators for)  
 IT Zeolites, uses and miscellaneous  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (A, laundry detergents containing, peroxy acid bleach in, activators for)  
 IT Detergents  
 (laundry, peroxy acid bleach in zeolite-containing, activators for)  
 IT **66280-55-5**, Diperoxododecanedioic acid  
 RL: USES (Uses)  
 (bleaching by, in laundering, phosphonates for improved)  
 IT 1429-50-1D, Ethylene diamine tetrakis(methylene phosphonic acid), tricalcium complex  
 RL: USES (Uses)  
 (peroxy acid bleach activator, in laundry detergents containing zeolites)  
 IT 1335-30-4  
 RL: USES (Uses)  
 (zeolites, A, laundry detergents containing, peroxy acid bleach in, activators for)  
 IT **66280-55-5**, Diperoxododecanedioic acid  
 RL: USES (Uses)  
 (bleaching by, in laundering, phosphonates for improved)  
 RN 66280-55-5 HCAPLUS  
 CN Dodecanediperoxoic acid (9CI) (CA INDEX NAME)



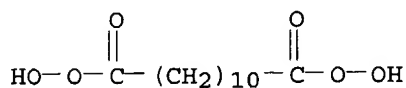
L85 ANSWER 39 OF 53 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1989:175549 HCAPLUS  
 DN 110:175549  
 ED Entered STN: 12 May 1989  
 TI Cleaning of food-stained linen with acids, bleaching agents, alkali builders, and detergents  
 IN Tsutazumi, Junichi; Obara, Masataka; Iguchi, Kazuo  
 PA Kao Corp., Japan  
 SO Jpn. Kokai Tokkyo Koho, 4 pp.  
 CODEN: JKXXAF  
 DT **Patent**  
 LA Japanese  
 IC ICM D06L001-16  
 ICS C11D007-34; C11D017-00; D06L003-02

## CC 46-6 (Surface Active Agents and Detergents)

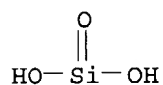
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 63190076	A2	19880805	JP 1987-21968	19870202 <--
PRAI	JP 1987-21968		19870202 <--		
AB	Food-stained table cloths and napkins are cleaned by washing (1) with acidic solns. (pH = 1.5-4), then with aqueous solns. containing bleaching agents, alkali builders (A), and detergents (B), or (2) with acidic solns. (pH = 1.5-4) containing organic per acids, then with aqueous solns. containing A and				
B.	A food-stained table cloth was washed with a solution (pH 2.1) containing 0.2% p-toluenesulfonic acid and 0.1% Mg monoperphthalate at 60° for 10 min, then with a solution containing 0.1% Lunace P 200 (containing nonionic surfactant, soap, and Na tripolyphosphate) and 0.1% Na metasilicate at 60° for 10 min. The cleaning method afforded better cleaning than a conventional method.				
ST	food stained linen cleaning acid; alkali builder cleaning food stained linen; bleaching agent cleaning food stained linen				
IT	Acids, uses and miscellaneous				
	RL: USES (Uses) (cleaning of food-stained linen with alkali builders and bleaching agents and detergents and)				
IT	Food (linen stained by, cleaning of, with acids and bleaching agents and alkali builders and detergents)				
IT	<b>Cleaning</b> (of food-stained linen)				
IT	Bleaching agents (organic per acids, cleaning of food-stained linen with acids and alkali builders and detergents and)				
IT	Detergents (cleaning compns., containing acid and alkali builder and bleaching agent, for food-stained linen)				
IT	Textiles (linen, food-stained, cleaning of, with acids and bleaching agents and alkali builders and detergents)				
IT	Carboxylic acids, uses and miscellaneous				
	RL: USES (Uses) (peroxy, cleaning of food-stained linen with acids and alkali builders and detergents and)				
IT	<b>66280-55-5</b> , Dodecanediperoxoic acid 78948-87-5 RL: USES (Uses) (cleaning of food-stained linen with acids and alkali builders and detergents and)				
IT	120112-96-1, Lunace P 200 RL: USES (Uses) (cleaning of food-stained linen with acids and bleaching agents and alkali builders and)				
IT	<b>6834-92-0</b> , Sodium metasilicate RL: USES (Uses) (cleaning of food-stained linen with acids and bleaching agents and detergents)				
IT	77-92-9, uses and miscellaneous 104-15-4, p-Toluenesulfonic acid, uses and miscellaneous 7647-01-0, Hydrochloric acid, uses and miscellaneous RL: USES (Uses) (cleaning of food-stained linen with alkali builders and bleaching agents and detergents and)				
IT	<b>66280-55-5</b> , Dodecanediperoxoic acid RL: USES (Uses) (cleaning of food-stained linen with acids and alkali builders and detergents and)				

RN 66280-55-5 HCAPLUS  
 CN Dodecanediperoxoic acid (9CI) (CA INDEX NAME)



IT 6834-92-0, Sodium metasilicate  
 RL: USES (Uses)  
 (cleaning of food-stained linen with acids and bleaching agents and  
 detergents)  
 RN 6834-92-0 HCAPLUS  
 CN Silicic acid (H<sub>2</sub>SiO<sub>3</sub>), disodium salt (8CI, 9CI) (CA INDEX NAME)



● 2 Na

L85 ANSWER 40 OF 53 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1989:59965 HCAPLUS  
 DN 110:59965  
 ED Entered STN: 17 Feb 1989  
 TI **Stable** aqueous peroxydicarboxylic acid bleach suspension and its  
 preparation and use  
 IN Dankowski, Manfred; Lieser, Thomas; Prescher, Guenter; Leonhardt, Wolfgang  
 PA Degussa A.-G., Fed. Rep. Ger.  
 SO Ger. Offen., 7 pp.  
 CODEN: GWXXBX  
 DT **Patent**  
 LA German  
 IC ICM D06L003-02  
 ICS C11D003-395; C11D003-48  
 ICA C07C179-10  
 CC 46-5 (Surface Active Agents and Detergents)  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3709347	A1	19881006	DE 1987-3709347	19870321 <--
	FI 8800199	A	19880922	FI 1988-199	19880118 <--
	EP 283791	A2	19880928	EP 1988-103336	19880304 <--
	EP 283791	A3	19890607		
	EP 283791	B1	19910508		
	R: AT, BE, CH, DE, ES, FR, GB, IT, LI, NL, SE				
	AT 63332	E	19910515	AT 1988-103336	19880304 <--
	US 4790949	A	19881213	US 1988-168996	19880316 <--
	DK 8801455	A	19880922	DK 1988-1455	19880317 <--
	JP 63249770	A2	19881017	JP 1988-65963	19880322 <--
PRAI	DE 1987-3709347		19870321		<--
	EP 1988-103336		19880304		<--

AB The title suspensions, having good resistance to phase separation and loss of active O during storage, contain **colloidal** silica as a thickening agent and a hydratable peroxydicarboxylic acid-desensitizing neutral salt and are especially useful in combination with detergents. An aqueous

suspension contained diperoxydodecanedioic acid 25, Na<sub>2</sub>SO<sub>4</sub> 9.3, and Aerosil 200 2.5%.

ST bleach peroxycarboxylic suspension **stability**;  
diperoxydodecanedioic bleach suspension; dodecanedioic diperoxy bleach suspension; silica **colloidal** thickener bleach; **sodium sulfate** diperoxydodecanedioic suspension

IT Bleaching agents  
(peroxycarboxylic acids, aqueous suspensions containing, thickened, **stable**)

IT Thickening agents  
(silica, aqueous peroxycarboxylic acid bleach suspensions containing)

IT **66280-55-5**, Diperoxydodecanedioic acid  
RL: USES (Uses)  
(bleaching agents, aqueous suspensions containing, thickened, **stable**)

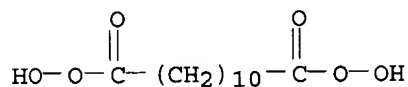
IT 7631-86-9, Silica, uses and miscellaneous  
RL: USES (Uses)  
(**colloidal**, thickening agents, aqueous peroxycarboxylic acid suspensions containing)

IT **7757-82-6**, Disodium sulfate, uses and miscellaneous  
RL: USES (Uses)  
(peroxycarboxylic acid bleach suspensions containing, thickened, **stable**)

IT **66280-55-5**, Diperoxydodecanedioic acid  
RL: USES (Uses)  
(bleaching agents, aqueous suspensions containing, thickened, **stable**)

RN 66280-55-5 HCAPLUS

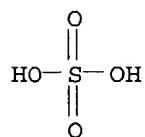
CN Dodecanediperoxoic acid (9CI) (CA INDEX NAME)



IT **7757-82-6**, Disodium sulfate, uses and miscellaneous  
RL: USES (Uses)  
(peroxycarboxylic acid bleach suspensions containing, thickened, **stable**)

RN 7757-82-6 HCAPLUS

CN Sulfuric acid disodium salt (8CI, 9CI) (CA INDEX NAME)



● 2 Na

L85 ANSWER 41 OF 53 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1989:25789 HCAPLUS

DN 110:25789

ED Entered STN: 21 Jan 1989

TI Caking-resistant **powder** detergent compositions with good storage **stability**

IN Tsutazumi, Junichi; Obara, Masataka; Iguchi, Kazuo



PA Kao Corp., Japan  
 SO Jpn. Kokai Tokkyo Koho, 3 pp.  
 CODEN: JKXXAF  
 DT **Patent**  
 LA Japanese  
 IC ICM C11D010-04  
 ICI C11D010-04, C11D001-72, C11D003-395, C11D009-02, C11D003-10, C11D003-08  
 CC 46-6 (Surface Active Agents and Detergents)  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 63196698	A2	19880815	JP 1987-27748	19870209 <--
	JP 07005906	B4	19950125		
PRAI	JP 1987-27748		19870209	<--	

AB The title compns. comprise peroxides (A) 1-20, nonionic surfactants (B) 1-10, higher fatty acid salts (C) 1-10, Na<sub>2</sub>CO<sub>3</sub> (I) 25-60, and **powd** . Na silicate (II) (SiO<sub>2</sub>/Na<sub>2</sub>O = 2.5-3.5, mol ratio) 1-10% at (B + C)/(I + II) = 0.08-0.43. Thus, Na perborate 5, polyoxyethylene dodecyl ether 4, I 47, II (SiO<sub>2</sub>/Na<sub>2</sub>O = 2.5, mol ratio) 5, beef tallow fatty acid Na salt 4, Na triphosphosphate 20, **Na<sub>2</sub>SO<sub>4</sub>** 9.4, CMC 1, a fluorescent dye 0.1, and water 4.5% were mixed to give a detergent, which showed 92% retention of effective O after 14-days storage at 40° and 80% relative humidity and cake-breaking load (after 14-day storage at 40° and 80% relative humidity under 2 kg load) 0 g, vs. 68 and 270, resp., for a similar detergent containing II (SiO<sub>2</sub>/Na<sub>2</sub>O = 2.0 mol ratio).

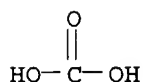
ST **powd** detergent caking resistant; storage **stable**  
**powder** detergent compn; sodium silicate **powder** detergent compn

IT Detergents  
 (powdered, sodium silicate-containing, caking-resistant)

IT 497-19-8, Sodium carbonate, uses and miscellaneous 1344-09-8,  
 Sodium silicate 7632-04-4, Sodium perborate 9002-92-0,  
 Polyoxyethylene dodecyl ether 66280-55-5, Dodecanediperoxoic acid 114915-85-4  
 RL: USES (Uses)  
 (powder detergents containing, caking-resistant, storage-stable)

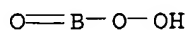
IT 497-19-8, Sodium carbonate, uses and miscellaneous  
 7632-04-4, Sodium perborate 66280-55-5,  
 Dodecanediperoxoic acid  
 RL: USES (Uses)  
 (powder detergents containing, caking-resistant, storage-stable)

RN 497-19-8 HCAPLUS  
 CN Carbonic acid disodium salt (8CI, 9CI) (CA INDEX NAME)



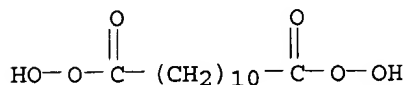
●2 Na

RN 7632-04-4 HCAPLUS  
 CN Perboric acid (HBO(O<sub>2</sub>)), sodium salt (9CI) (CA INDEX NAME)



● Na

RN 66280-55-5 HCAPLUS  
 CN Dodecanediperoxoic acid (9CI) (CA INDEX NAME)

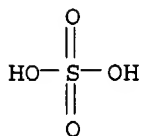


L85 ANSWER 42 OF 53 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1988:548890 HCAPLUS  
 DN 109:148890  
 ED Entered STN: 28 Oct 1988  
 TI Procedure for the desensitization of water-insoluble peroxy-carboxylic acids  
 IN Dankowski, Manfred; Hofen, Willi  
 PA Degussa A.-G., Fed. Rep. Ger.  
 SO Ger. Offen., 7 pp.  
 CODEN: GWXXBX  
 DT Patent  
 LA German  
 IC ICM C07C179-10  
 CC 23-16 (Aliphatic Compounds)  
 Section cross-reference(s): 40  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3628263	A1	19880303	DE 1986-3628263	19860825 <--
	DE 3628263	C2	19900712		
	FI 8702671	A	19880226	FI 1987-2671	19870616 <--
	EP 257273	A2	19880302	EP 1987-110140	19870714 <--
	EP 257273	A3	19890322		
	EP 257273	B1	19910410		
	R: AT, BE, CH, DE, ES, FR, GB, IT, LI, LU, NL, SE				
	AT 62475	E	19910415	AT 1987-110140	19870714 <--
	BR 8704268	A	19880412	BR 1987-4268	19870819 <--
	JP 63060965	A2	19880317	JP 1987-209431	19870825 <--
	US 4874556	A	19891017	US 1988-266237	19881028 <--
PRAI	DE 1986-3628263		19860825 <--		
	US 1987-63045		19870617 <--		
	EP 1987-110140		19870714 <--		
AB	A procedure for desensitization of H <sub>2</sub> O-insol. peroxy-carboxylic acids with essentially Na <sub>2</sub> SO <sub>4</sub> as desensitizing agent, whereby one brings the peroxy-carboxylic acids into contact with the desensitizing agent in the aqueous medium, seps. the desensitized peroxy-carboxylic acids in a known manner from the mother liquor and before drying, optionally conditions, and recycles the Na <sub>2</sub> SO <sub>4</sub> dissolved in the mother liquor, was characterized in that one withdraws heat from the mother liquor after separation of the desensitized peroxy-carboxylic acids for crystallization of Na <sub>2</sub> SO <sub>4</sub> .10H <sub>2</sub> O and optionally also Na <sub>2</sub> SO <sub>4</sub> .7H <sub>2</sub> O, seps. the crystallized Na <sub>2</sub> SO <sub>4</sub> hydrates from the impurity-containing waste liquors, and recycles at least a portion of the separated Na <sub>2</sub> SO <sub>4</sub> hydrates themselves or after their conversion into an aqueous solution and/or anhydrous Na <sub>2</sub> SO <sub>4</sub> into the process. Peroxy-carboxylic acids are used				

not only as oxidizing agents in organic synthesis but also used as bleaching agents in washing and cleaning agents, especially for textiles, since they become active <80°. The examples illustrate: 1) the processing of a mother liquor from the preparation and desensitization of diperoxydodecanedioic acid; 2) conversion of the  $\text{Na}_2\text{SO}_4 \cdot 10\text{H}_2\text{O}$  into a saturated solution and anhydrous  $\text{Na}_2\text{SO}_4$ ; 3) desensitization of diperoxydodecanedioic acid.

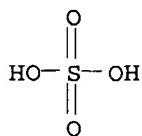
- ST desensitization diperoxydodecanedioic acid **sodium sulfate**; peroxydodecanedioic acid desensitization **sodium sulfate**; dodecanedioic acid peroxy desensitization **sodium sulfate**; recycle **sodium sulfate** desensitization peroxy acid
- IT Bleaching agents  
(peroxycarboxylic acids, for textiles, desensitization of)
- IT Carboxylic acids, uses and miscellaneous  
RL: USES (Uses)  
(peroxy, desensitization of water insol.)
- IT 7727-73-3, **Sodium sulfate** decahydrate  
RL: PROC (Process)  
(conversion of, into saturated solution and anhydrous **sodium sulfate**)
- IT 7757-82-6, **Sodium sulfate**, uses and miscellaneous  
RL: USES (Uses)  
(desensitization by, of diperoxydodecanedioic acid)
- IT 66280-55-5, Diperoxydodecanedioic acid  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(desensitization of, and processing of mother liquor from)
- IT 693-23-2, Dodecanedioic acid  
RL: PROC (Process)  
(peroxidn. of, and subsequent desensitization)
- IT 7727-73-3, **Sodium sulfate** decahydrate  
RL: PROC (Process)  
(conversion of, into saturated solution and anhydrous **sodium sulfate**)
- RN 7727-73-3 HCAPLUS
- CN Sulfuric acid disodium salt, decahydrate (8CI, 9CI) (CA INDEX NAME)



●2 Na

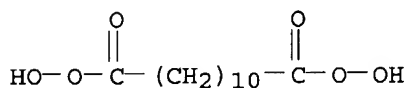
●10  $\text{H}_2\text{O}$

- IT 7757-82-6, **Sodium sulfate**, uses and miscellaneous  
RL: USES (Uses)  
(desensitization by, of diperoxydodecanedioic acid)
- RN 7757-82-6 HCAPLUS
- CN Sulfuric acid disodium salt (8CI, 9CI) (CA INDEX NAME)



●2 Na

IT 66280-55-5, Diperoxydodecanedioic acid  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (desensitization of, and processing of mother liquor from)  
 RN 66280-55-5 HCAPLUS  
 CN Dodecanediperoxoic acid (9CI) (CA INDEX NAME)



L85 ANSWER 43 OF 53 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1988:531285 HCAPLUS  
 DN 109:131285  
 ED Entered STN: 14 Oct 1988  
 TI Processes for encapsulation of peracid granules  
 IN Jacobs, Jochen; Carduck, Franz Josef; Smulders, Eduard; Dankowski, Manfred  
 PA Henkel K.-G.a.A., Fed. Rep. Ger.  
 SO Ger. Offen., 8 pp.  
 CODEN: GWXXBX  
 DT Patent  
 LA German  
 IC ICM D06L003-02  
 ICS B01J002-30; C11D003-39; C11D003-395; C07C179-10  
 ICA A01N037-02; A01N025-12  
 CC 46-5 (Surface Active Agents and Detergents)  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3636904	A1	19880505	DE 1986-3636904	19861030 <--
	EP 272402	A2	19880629	EP 1987-115498	19871022 <--
	EP 272402	A3	19881228		
	EP 272402	B1	19910313		
	R: AT, BE, CH, DE, ES, FR, GB, IT, LI, NL, SE				
	AT 61628	E	19910315	AT 1987-115498	19871022 <--
	DK 8705675	A	19880501	DK 1987-5675	19871029 <--
	JP 63122798	A2	19880526	JP 1987-277244	19871030 <--
PRAI	DE 1986-3636904		19861030	<--	
	EP 1987-115498		19871022	<--	

AB Peracid-containing granules in a fluidizing apparatus are sprayed with an aqueous solution or dispersion or a polymer of an unsatd. C3-6 carboxylic acid and dried to prepare encapsulated granules which do not interact with other components, such as perfumes, upon addition to detergent compns. as bleaching agents. Granules containing  $\alpha,\omega$ -diperoxydodecanedioic acid 1.9,  $\text{MgSO}_4$  3.8,  $\text{Na}_2\text{SO}_4$  78.8, poly(acrylic acid) (I) 1.0, and water 3.0% were sprayed at 20% aqueous I solution in a fluidizing apparatus and dried to give granules which are coated with 2% I. The granules did not effect the odor of a perfume in a detergent powder during 4 wk, vs 1

with uncoated granules.

ST carboxylic polymer encapsulation peracid; bleach peracid encapsulation; peroxydodecanedioic acid encapsulation

IT Encapsulation  
(of peracids, granules containing, for detergents)

IT Bleaching agents  
(peracids, granules containing, encapsulation of)

IT Detergents  
(laundry, granules containing encapsulated peracid bleaching agents for)

IT Carboxylic acids, uses and miscellaneous  
RL: USES (Uses)  
(peroxy, granules containing, bleaching agents, for detergents)

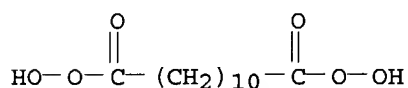
IT **66280-55-5**, Diperoxydodecanedioic acid  
RL: USES (Uses)  
(bleaching agents, granules containing, encapsulation of)

IT 9003-01-4, Poly(acrylic acid) 9003-16-1, Fumaric acid polymer  
25087-26-7, Poly(methacrylic acid) 26007-90-9, Crotonic acid polymer  
26099-09-2, Maleic acid polymer 29132-58-9, Acrylic acid-maleic acid copolymer 35326-33-1, Poly( $\alpha$ -hydroxyacrylic acid)  
RL: USES (Uses)  
(encapsulation by, of peracid-containing granules)

IT **66280-55-5**, Diperoxydodecanedioic acid  
RL: USES (Uses)  
(bleaching agents, granules containing, encapsulation of)

RN 66280-55-5 HCAPLUS

CN Dodecanediperoxoic acid (9CI) (CA INDEX NAME)



L85 ANSWER 44 OF 53 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1988:408448 HCAPLUS

DN 109:8448

ED Entered STN: 09 Jul 1988

TI Granulated **stable** peroxy acid bleach composition and its use in laundry detergents

IN Finch, Timothy David

PA Unilever N. V., Neth.; Unilever PLC

SO Eur. Pat. Appl., 8 pp.

CODEN: EPXXDW

DT **Patent**

LA English

IC ICM C11D003-39

ICS C11D003-37

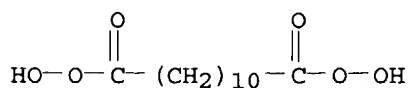
CC 46-5 (Surface Active Agents and Detergents)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 256443	A2	19880224	EP 1987-111425	19870807 <--
	EP 256443	A3	19881214		
	R: CH, DE, ES, FR, GB, IT, LI, NL, SE				
	AU 8776745	A1	19880218	AU 1987-76745	19870810 <--
	AU 600503	B2	19900816		
	BR 8704199	A	19880412	BR 1987-4199	19870813 <--
	JP 63048400	A2	19880301	JP 1987-203007	19870814 <--
	ZA 8706041	A	19890426	ZA 1987-6041	19870814 <--
PRAI	GB 1986-19953		19860815	<--	
AB	The title bleach composition containing a solid organic peroxy acid 20-65, $\geq 1$				

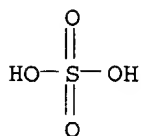
inert inorg. salt 30-79.5, and an oxidation-resistant acidic polymeric binder 0.5-6.5% and having particle size 500-2000  $\mu$  has good storage **stability** and bleaching effectiveness, especially as a bleach component in laundry detergents. Thus, a mixture of 32.6 parts diperoxydodecanedioic acid and 66.78 parts **Na<sub>2</sub>SO<sub>4</sub>** was sprayed with a solution containing 0.62 part poly(acrylic acid) (mol. weight 250,000), dried, and sieved to prepare a granular bleach composition, which was mixed with a **powdered** laundry detergent. The mixture lost <25% of the active O during 60 days at 30° and 75% relative humidity.

- ST peroxy acid bleach granular **stability**; polyacrylic acid binder bleach; binder peroxy acid bleach; **sodium sulfate** peroxy acid bleach; laundry detergent bleach **stability**
- IT Binding materials  
(acidic polymers, peroxy acid bleach granules containing, for improved **stability** in laundry detergents)
- IT Polyelectrolytes  
(acidic, binders, peroxy acid bleach granules containing)
- IT Granular substances  
(peroxy acid bleach containing acidic polymers, for improved **stability** in laundry detergents)
- IT Bleaching agents  
(peroxy acids, granulated, containing acidic polymers, with improved **stability** in laundry detergents)
- IT Detergents  
(laundry, granulated peroxy acid bleach for, with improved **stability**)
- IT Acids, uses and miscellaneous  
RL: USES (Uses)  
(peroxy, bleaching agents, granulated, **stable**, for laundry detergents)
- IT 9003-01-4, Poly(acrylic acid) 9003-01-4D, Poly(acrylic acid), phosphinate derivs.  
RL: USES (Uses)  
(binders, peroxy acid bleach granules containing, for improved **stability**)
- IT **66280-55-5**, Diperoxydodecanedioic acid  
RL: USES (Uses)  
(bleaching agents, granulated, **stable**, for laundry detergents)
- IT **7757-82-6**, **Sodium sulfate**, uses and miscellaneous  
RL: USES (Uses)  
(peroxy acid bleach granules containing, **stable** in laundry detergents)
- IT **66280-55-5**, Diperoxydodecanedioic acid  
RL: USES (Uses)  
(bleaching agents, granulated, **stable**, for laundry detergents)
- RN 66280-55-5 HCAPLUS
- CN Dodecanediperoxoic acid (9CI) (CA INDEX NAME)



- IT **7757-82-6**, **Sodium sulfate**, uses and miscellaneous  
RL: USES (Uses)  
(peroxy acid bleach granules containing, **stable** in laundry detergents)
- RN **7757-82-6** HCAPLUS

CN Sulfuric acid disodium salt (8CI, 9CI) (CA INDEX NAME)



●2 Na

L85 ANSWER 45 OF 53 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1988:44078 HCAPLUS

DN 108:44078

ED Entered STN: 06 Feb 1988

TI **Stabilized** aqueous solution of aromatic percarbonic acid and its use in **disinfection**, oxidation, and bleaching

IN Beilfuss, Wolfgang; Diehl, Karl Heinz

PA Schuelke und Mayr G.m.b.H., Fed. Rep. Ger.

SO Ger. Offen., 6 pp.

CODEN: GWXXBX

DT **Patent**

LA German

IC ICM C07C179-133

ICS D06L003-02; C11D003-395; A01N037-10; A01N037-02; A01N043-40

CC 63-8 (Pharmaceuticals)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3543500	A1	19870611	DE 1985-3543500	19851210 <--
	DE 3543500	C2	19920220		
PRAI	DE 1985-3543500		19851210	<--	

OS CASREACT 108:44078

AB An aqueous solution of aromatic percarbonic acid is **stabilized** with (a) at least equal amts. of the corresponding aromatic carbonic acid and (b) an aqueous

**perglutaric acid** solution **stabilized** with excess H<sub>2</sub>O<sub>2</sub> and/or a 10-60% H<sub>2</sub>O<sub>2</sub> solution A solution containing benzoic anhydride, glutaric anhydride, pyridine-2,6-dicarboxylic acid and H<sub>2</sub>O<sub>2</sub> stored at room temperature for 19 mos. gave better results against *Candida albicans* than similar solns. not containing benzoic anhydride (or also containing benzoic acid).

ST percarboxylic acid soln **disinfection stability**;  
 carboxylic acid soln **disinfection stability**; bleaching  
 arom carboxylic percarboxylic; oxidn arom carboxylic percarboxylic

IT **Bactericides, Disinfectants, and Antiseptics**

Bleaching agents

Oxidizing agents

(aromatic peroxy-carboxylic acid-containing carboxylic acid-hydrogen peroxide solns. as)

IT *Candida albicans*

(infection with, benzoic acid anhydride-glutaric acid

anhydride-hydrogen peroxide-containing solution for prevention of)

IT Anhydrides

Carboxylic acids, uses and miscellaneous

RL: BIOL (Biological study)

(aryl, in **disinfection**, oxidation, and/or bleaching agents)

IT Carboxylic acids, biological studies

RL: BIOL (Biological study)

(aryl, peroxy, in **disinfection**, oxidation, and/or bleaching agents)

IT 7722-84-1  
RL: BIOL (Biological study)  
(bleaching agents, aromatic peroxycarboxylic acid-containing carboxylic acid-hydrogen peroxide solns. as)

IT 93-59-4  
RL: BIOL (Biological study)  
(bleaching or **disinfection** or oxidation agents containing benzoic acid and)

IT 93-97-0, Benzoic acid anhydride  
RL: BIOL (Biological study)  
(**disinfection** or bleaching or oxidation agents containing)

IT 28317-46-6, **Perglutaric acid**  
RL: BIOL (Biological study)  
(in bleaching or **disinfection** or oxidation agents containing benzoic and perbenzoic acids)

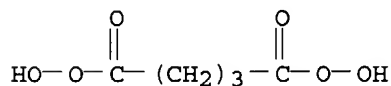
IT 65-85-0, biological studies  
RL: BIOL (Biological study)  
(in bleaching or **disinfection** or oxidation agents containing perbenzoic acid)

IT 108-55-4 7722-84-1, biological studies  
RL: BIOL (Biological study)  
(in bleaching or **disinfection** or oxidation agents from aromatic peroxycarboxylic acids and corresponding carboxylic acids)

IT 28317-46-6, **Perglutaric acid**  
RL: BIOL (Biological study)  
(in bleaching or **disinfection** or oxidation agents containing benzoic and perbenzoic acids)

RN 28317-46-6 HCAPLUS

CN Pentanediperoxoic acid (9CI) (CA INDEX NAME)



L85 ANSWER 46 OF 53 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1987:140145 HCAPLUS

DN 106:140145

ED Entered STN: 01 May 1987

TI Dry bleach and **stable** enzyme granular composition

IN Herdeman, Robert William

PA Procter and Gamble Co., USA

SO Eur. Pat. Appl., 18 pp.  
CODEN: EPXXDW

DT **Patent**

LA English

IC ICM C11D003-386  
ICS C11D003-39

CC 46-5 (Surface Active Agents and Detergents)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 206418	A2	19861230	EP 1986-201055	19860618 <--
	EP 206418	A3	19881117		
	EP 206418	B1	19911113		
	R: BE, DE, FR, GB, IT, LU, NL				
	AU 8659322	A1	19870108	AU 1986-59322	19860627 <--
	AU 585031	B2	19890608		
	JP 62079296	A2	19870411	JP 1986-151359	19860627 <--



CA 1285508                      A1    19910702                      CA 1986-512635    19860627 <--  
 US 4767557                      A     19880830                      US 1987-131294    19871209 <--  
 PRAI US 1985-750569                      19850628 <--  
 AB Storage-**stable** compns. are prepared which comprise peroxy acid  
 bleach-containing granules and granules containing enzymes, alkaline buffer  
 salt,  
 cellulosic filler, and binder. In some cases, the enzyme-containing granules  
 also contain an antioxidant (e.g., Na2SO3), CaCl2 or another compatible  
 inorg. salt, and/or a coating of water-insol. waxy nonionic material. The  
 granular compns. are useful in detergent formulations. Granules were  
 prepared from proteolytic enzyme 4, amylase 1, alkaline buffer salt (KHCO3 20,  
 Na2SO3 5, and CaCl2-NaCl 20 parts) 45, cellulose **powder** 20,  
 poly(vinylpyrrolidone) 5, and waxy polyethylene glycol (coating) 25%. The  
 granules were used in mixts. with bleach granules containing  
 diperoxydodecanedioic acid.  
 ST enzyme **stabilizer** buffer bleach; peroxy bleach enzyme  
**stability**; potassium bicarbonate **stabilizer** enzyme;  
 proteinase **stabilizer** buffer bleach; amylase **stabilizer**  
 buffer bleach; antioxidant inorg **stabilizer** enzyme  
 IT Buffer substances and systems  
     (alkaline, **stabilizers**, for enzymes in granules)  
 IT **Stabilizing** agents  
     (buffer substances, for enzyme granules)  
 IT Waxes and Waxy substances  
 RL: USES (Uses)  
     (enzyme granules coated with, storage-**stable**)  
 IT Detergents  
     (enzyme granules for use with peroxy acid bleach granules in,  
     **stable**)  
 IT Bleaching agents  
     (peroxy acids, storage-**stable** enzyme granules for use with)  
 IT Antioxidants  
     (sodium sulfite and thiosulfate, enzyme granules containing, **stable**  
     )  
 IT Alcohols, compounds  
 RL: USES (Uses)  
     (ethoxylated, enzyme granules coated with, storage-**stable**)  
 IT 7631-90-5, Sodium bisulfite 7757-83-7, Sodium sulfite  
 7772-98-7, Sodium thiosulfate  
 RL: USES (Uses)  
     (antioxidants, enzyme granules containing, storage-**stable**)  
 IT 66280-55-5, Diperoxy dodecane dioic acid  
 RL: USES (Uses)  
     (bleach granules containing, storage-**stable** enzyme granules for  
     use with)  
 IT 144-55-8, Sodium bicarbonate, uses and miscellaneous 298-14-6,  
 Potassium bicarbonate 497-19-8, Disodium carbonate, uses and  
 miscellaneous 584-08-7, Dipotassium carbonate 7320-34-5  
 , Tetrapotassium pyrophosphate  
 RL: USES (Uses)  
     (buffers, enzyme granules containing, storage-**stable**)  
 IT 57-10-3, Palmitic acid, uses and miscellaneous 31566-31-1, Glycerol  
 monostearate  
 RL: USES (Uses)  
     (enzyme granules coated by, storage-**stable**)  
 IT 25322-68-3, Polyethylene glycol  
 RL: USES (Uses)  
     (enzyme granules coated with, storage-**stable**)  
 IT 7778-18-9, Calcium sulfate 10043-52-4, Calcium chloride,  
 uses and miscellaneous  
 RL: USES (Uses)  
     (enzyme granules containing, storage-**stable**)  
 IT 9000-92-4, Amylase 9001-92-7, Proteinase

RL: USES (Uses)

(granules containing, storage-**stable**, for use with peroxy acid bleach)

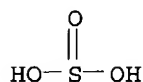
IT 7757-83-7, Sodium sulfite 7772-98-7, Sodium thiosulfate

RL: USES (Uses)

(antioxidants, enzyme granules containing, storage-**stable**)

RN 7757-83-7 HCAPLUS

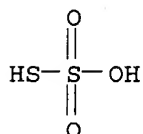
CN Sulfurous acid, disodium salt (8CI, 9CI) (CA INDEX NAME)



●2 Na

RN 7772-98-7 HCAPLUS

CN Thiosulfuric acid (H<sub>2</sub>S<sub>2</sub>O<sub>3</sub>), disodium salt (9CI) (CA INDEX NAME)



●2 Na

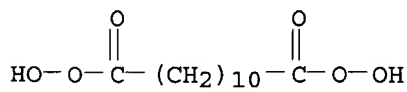
IT 66280-55-5, Diperoxy dodecane dioic acid

RL: USES (Uses)

(bleach granules containing, storage-**stable** enzyme granules for use with)

RN 66280-55-5 HCAPLUS

CN Dodecanediperoxoic acid (9CI) (CA INDEX NAME)



IT 144-55-8, Sodium bicarbonate, uses and miscellaneous

497-19-8, Disodium carbonate, uses and miscellaneous

584-08-7, Dipotassium carbonate 7320-34-5,

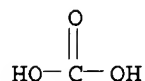
Tetrapotassium pyrophosphate

RL: USES (Uses)

(buffers, enzyme granules containing, storage-**stable**)

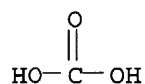
RN 144-55-8 HCAPLUS

CN Carbonic acid monosodium salt (8CI, 9CI) (CA INDEX NAME)



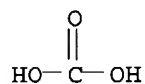
● Na

RN 497-19-8 HCAPLUS  
 CN Carbonic acid disodium salt (8CI, 9CI) (CA INDEX NAME)



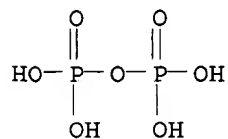
●2 Na

RN 584-08-7 HCAPLUS  
 CN Carbonic acid, dipotassium salt (8CI, 9CI) (CA INDEX NAME)



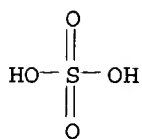
●2 K

RN 7320-34-5 HCAPLUS  
 CN Diphosphoric acid, tetrapotassium salt (9CI) (CA INDEX NAME)



●4 K

IT 7778-18-9, Calcium sulfate 10043-52-4, Calcium chloride,  
 uses and miscellaneous  
 RL: USES (Uses)  
 (enzyme granules containing, storage-**stable**)  
 RN 7778-18-9 HCAPLUS  
 CN Sulfuric acid, calcium salt (1:1) (8CI, 9CI) (CA INDEX NAME)



● Ca

RN 10043-52-4 HCAPLUS  
 CN Calcium chloride (CaCl<sub>2</sub>) (9CI) (CA INDEX NAME)

Cl--Ca--Cl

L85 ANSWER 47 OF 53 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1984:456025 HCAPLUS  
 DN 101:56025  
 ED Entered STN: 18 Aug 1984  
 TI **Stable** emulsions  
 PA Nippon Synthetic Chemical Industry Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 5 pp.  
 CODEN: JKXXAF

DT **Patent**  
 LA Japanese  
 IC C09J003-14; B01F017-52; C08K005-00  
 ICA C08F002-00  
 CC 37-6 (Plastics Manufacture and Processing)  
 Section cross-reference(s): 38

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 58217571	A2	19831217	JP 1982-101041	19820611 <--
PRAI	JP 1982-101041		19820611	<--	

AB Compns. are prepared by adding ≥1 waterproofing agents selected from radical initiators, oxidizing agents, isocyanates, epoxides, ammonium salts, and metal salts of polymerizable monomers to an emulsion **stabilized** with acetoacetylated poly(vinyl alc.) (I) [39290-68-1] as protective **colloid**. The compns. afford excellent waterproofing properties and are useful for preparing adhesives for paper, wood, and plastics. Thus, an emulsion was prepared by polymerizing vinyl acetate in the presence of I, H<sub>2</sub>O, tartaric acid, and H<sub>2</sub>O<sub>2</sub> and mixing with wheat flour 7, CaCO<sub>3</sub> 5, and peroxysuccinic acid [2279-96-1] 5 parts.

ST acetoacetylated polyvinyl alc **stabilizer** emulsion; paper adhesive; wood adhesive; plastic adhesive; waterproofing agent polyvinyl acetate adhesive; peroxysuccinic acid waterproofing adhesive; epoxide waterproofing adhesive

IT Adhesives  
 (stabilized emulsions for, containing waterproofing agents)

IT Oxidizing agents  
 (waterproofing agents, for **stabilized** vinyl resin emulsions for preparing adhesives)

IT Epoxides  
 RL: PREP (Preparation)  
 (waterproofing agents, for **stabilizing** vinyl resin emulsions for adhesive preparation)

IT Waterproofing

(agents, for **stabilized** vinyl resin emulsions for preparing adhesives)

IT 9003-20-7 24937-78-8 25067-01-0

RL: USES (Uses)

(emulsions, containing **stabilizer** and waterproofing agent, for adhesive preparation)

IT 39290-68-1

RL: USES (Uses)

(vinyl resin emulsions **stabilized** by, containing waterproofing agents, for adhesive preparation)

IT 574-09-4 2224-15-9 **2279-96-1** 7727-54-0 **7786-30-3**,

uses and miscellaneous 12125-02-9, uses and miscellaneous

**13477-36-6** 26471-62-5 27043-36-3

RL: USES (Uses)

(waterproofing agents, for **stabilizing** vinyl resin emulsions for adhesive preparation)

IT **2279-96-1** **7786-30-3**, uses and miscellaneous

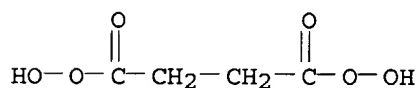
**13477-36-6**

RL: USES (Uses)

(waterproofing agents, for **stabilizing** vinyl resin emulsions for adhesive preparation)

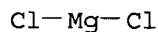
RN 2279-96-1 HCAPLUS

CN Butanediperoxoic acid (9CI) (CA INDEX NAME)



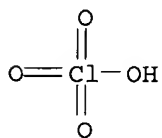
RN 7786-30-3 HCAPLUS

CN Magnesium chloride (MgCl<sub>2</sub>) (9CI) (CA INDEX NAME)



RN 13477-36-6 HCAPLUS

CN Perchloric acid, calcium salt (8CI, 9CI) (CA INDEX NAME)



● 1/2 Ca

L85 ANSWER 48 OF 53 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1984:176134 HCAPLUS

DN 100:176134

ED Entered STN: 26 May 1984

TI Adhesives for wood

PA Nippon Synthetic Chemical Industry Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DT **Patent**

LA Japanese

IC C09J003-14; B27G011-00; C08J003-06  
 CC 38-3 (Plastics Fabrication and Uses)  
 Section cross-reference(s): 43

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 59001581	A2	19840106	JP 1982-112328	19820628 <--
PRAI	JP 1982-112328		19820628 <--		

AB Adhesives for wood comprise an emulsion of a vinyl acetate (I) resin, acetoacetylated poly(vinyl alc.) (II), and isocyanate compds., epoxy compds., radical-forming compds., oxidizing agents, and/or acids. Thus, 100 parts I and 8 parts 5% aqueous solution of (NH<sub>4</sub>)<sub>2</sub>S<sub>2</sub>O<sub>8</sub> was added dropwise to a solution of 8 parts 7.8 mol% acetoacetylated II (average d. p. 1800) in 136 parts H<sub>2</sub>O at 75° during 3.5 h. After 1 h, 10 parts di-Bu phthalate was added to the mixture to give an emulsion. TDI [26471-62-5] 5, ethylene glycol diglycidyl ether [2224-15-9] 5 glycerol diglycidyl ether [27043-36-3] 5, peroxy succinic acid [2279-96-1] 5, (NH<sub>4</sub>)<sub>2</sub>S<sub>2</sub>O<sub>8</sub> 1, benzoin Et ether [574-09-4] 5, Ca(ClO<sub>4</sub>)<sub>2</sub> 2, or oxalic acid [144-62-7] 2 parts were added to the emulsion to give an adhesive.

ST vinyl acetate polymer adhesive wood; polyvinyl alc acetoacetate adhesive; butyl phthalate adhesive; TDI adhesive; ethylene glycol glycidyl ether adhesive; glycerol glycidyl ether adhesive; ammonium persulfate adhesive; benzoin ethyl ether adhesive; oxalic acid adhesive; peroxy succinic acid adhesive

IT Adhesives  
 (vinyl acetate polymers, for wood)

IT 9003-20-7 24937-78-8 25067-01-0  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (adhesives, prepared in presence of poly(vinyl alc.) acetoacetate, for wood)

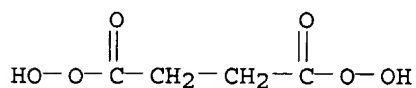
IT 39290-68-1  
 RL: USES (Uses)  
 (protective colloid, vinyl acetate polymers prepared in presence of, as adhesives for wood)

IT 144-62-7, uses and miscellaneous 574-09-4 2224-15-9 2279-96-1  
 7727-54-0 13477-36-6 26471-62-5 27043-36-3  
 RL: USES (Uses)  
 (vinyl acetate polymer adhesives containing, for wood)

IT 2279-96-1 13477-36-6  
 RL: USES (Uses)  
 (vinyl acetate polymer adhesives containing, for wood)

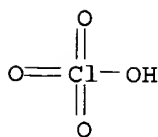
RN 2279-96-1 HCAPLUS

CN Butanediperoxoic acid (9CI) (CA INDEX NAME)



RN 13477-36-6 HCAPLUS

CN Perchloric acid, calcium salt (8CI, 9CI) (CA INDEX NAME)



● 1/2 Ca

L85 ANSWER 49 OF 53 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1983:91421 HCAPLUS

DN 98:91421

ED Entered STN: 12 May 1984

TI Composition and method for bleaching and **disinfecting** textiles

IN Kuzel, Peter; Schwab, Heinrich

PA Degussa A.-G., Fed. Rep. Ger.

SO Ger. Offen., 26 pp.

CODEN: GWXXBX

DT **Patent**

LA German

IC D06L003-02; C11D003-395; C11D003-48

CC 46-5 (Surface Active Agents and Detergents)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3121242	A1	19830105	DE 1981-3121242	19810529 <--
PRAI	DE 1981-3121242		19810529	<--	

AB Textiles are bleached and **disinfected** by treatment with an aqueous bath containing a mixture of Na perborate or Na percarbonate and  $\geq 1$  peroxy-carboxylic acid. Thus, a detergent composition containing 16.7 part Na perborate and 2-4 parts **diperazelaic acid** (I) [ 1941-79-3] was used to wash a wine-stained cotton textile at 60° to give a change in reflectance of 16.2% vs. a similar composition not containing I. This composition left no residual bacteria in a contaminated textile at 20° for 30 min, vs. contamination when I was omitted.

ST bactericide bleaching compn textile; washing bleaching **disinfecting** compn; perborate peroxy acid bleaching bactericide

IT Bleaching  
(**disinfecting** and, of textiles, washing compns. containing sodium perborate and diperoxy acids as)

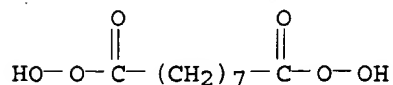
IT **Bactericides, Disinfectants, and Antiseptics**  
(sodium perborate-diperoxy carboxylic acids, for washing compns.)

IT 1941-79-3 11138-47-9 66280-55-5  
RL: USES (Uses)  
(bleaching-**disinfecting** washing compns. containing, for textiles)

IT 1941-79-3 66280-55-5  
RL: USES (Uses)  
(bleaching-**disinfecting** washing compns. containing, for textiles)

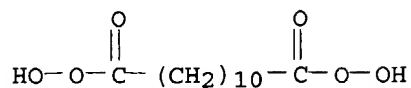
RN 1941-79-3 HCAPLUS

CN Nonanediperoxoic acid (9CI) (CA INDEX NAME)



RN 66280-55-5 HCAPLUS

CN Dodecanediperoxoic acid (9CI) (CA INDEX NAME)



L85 ANSWER 50 OF 53 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1980:64807 HCAPLUS

DN 92:64807

ED Entered STN: 12 May 1984

TI Storage-**stable** mixture producing an antimicrobial solution in water

IN Eggensperger, Heinz; Beilfuss, Wolfgang; Nolte, Helmut

PA Schuelke und Mayr G.m.b.H., Fed. Rep. Ger.

SO Ger. Offen., 15 pp. Adon. to Ger. Offen. 2,655,599.

CODEN: GWXXBX

DT **Patent**

LA German

IC A61L013-00

CC 63-8 (Pharmaceuticals)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2815400	A1	19791018	DE 1978-2815400	19780410 <--
PRAI	DE 1978-2815400		19780410	<--	

AB A mixture, **stable** in storage, which gave a solution with antimicrobial activity in H<sub>2</sub>O, contained a material decomposing to H<sub>2</sub>O<sub>2</sub> and 1 or more odorless or nearly so carboxylic acid anhydrides, m.  $\geq 40^\circ$ , which dissolve in H<sub>2</sub>O to give nearly odorless carboxylic acids. These were converted with H<sub>2</sub>O<sub>2</sub> into nearly odorless H<sub>2</sub>O-soluble peroxy-carboxylic acids with good antimicrobial activity. Thus, a mixture of maleic anhydride [108-31-6] 10, Na percarbonate [3313-92-6] 15, Na polyphosphate 25, and Na<sub>2</sub>SO<sub>4</sub> kept 5 mo, then dissolved in H<sub>2</sub>O, gave 1.45% H<sub>2</sub>O<sub>2</sub> and 9.51% permaleic acid [4565-24-6]; omitting the Na<sub>2</sub>SO<sub>4</sub> and using 75 g Na polyphosphate gave a solution with 1.30% H<sub>2</sub>O<sub>2</sub> and 8.77% permaleic acid. The bactericidal activity of solns. of maleic or glutaric acid anhydride and Na percarbonate in H<sub>2</sub>O was tabulated.

ST maleic anhydride mixt percarbonate bactericidal; glutaric anhydride mixt percarbonate bactericidal; storage **stable** bactericide; percarbonate mixt glutaric maleic anhydride

IT **Bactericides, Disinfectants and Antiseptics**  
(storage **stable** peracids, in solution)

IT Carboxylic acids, biological studies

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
(peroxy, bactericides, in storage **stable** mixts.)

IT **4565-24-6**

RL: FORM (Formation, nonpreparative)

(formation of, in water, for **stabilizing** bactericide solns.)

IT **7757-82-6**, biological studies

RL: BIOL (Biological study)

(**stabilizer**, for bactericidal composition)

IT **3313-92-6**

RL: BIOL (Biological study)

(storage **stable** bactericide composition containing anhydrides and)

IT 108-31-6, biological studies 108-55-4

RL: BIOL (Biological study)

(storage **stable** bactericide composition containing percarbonate and)

IT **4565-24-6**

RL: FORM (Formation, nonpreparative)

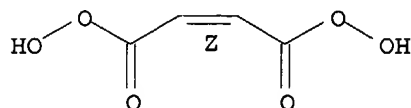


(formation of, in water, for **stabilizing** bactericide solns.)

RN 4565-24-6 HCAPLUS

CN 2-Butenediperoxoic acid, (2Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



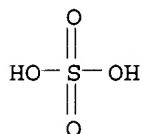
IT 7757-82-6, biological studies

RL: BIOL (Biological study)

(**stabilizer**, for bactericidal composition)

RN 7757-82-6 HCAPLUS

CN Sulfuric acid disodium salt (8CI, 9CI) (CA INDEX NAME)



●2 Na

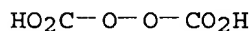
IT 3313-92-6

RL: BIOL (Biological study)

(storage **stable** bactericide composition containing anhydrides and)

RN 3313-92-6 HCAPLUS

CN Peroxydicarbonic acid, disodium salt (8CI, 9CI) (CA INDEX NAME)



●2 Na

L85 ANSWER 51 OF 53 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1979:534709 HCAPLUS

DN 91:134709

ED Entered STN: 12 May 1984

TI **Disinfectants** based on peracid-splitting compounds

AU Eggensperger, H.

CS Schuelke und Mayr G.m.b.H., Norderstedt, Fed. Rep. Ger.

SO Zentralblatt fuer Bakteriologie, Parasitenkunde, Infektionskrankheiten und Hygiene, Abteilung 1: Originale, Reihe B: Hygiene, Krankenhaushygiene, Betriebshygiene, Praeventive Medizin (1979), 168(5-6), 517-24

CODEN: ZHPMAT; ISSN: 0300-9661

DT Journal

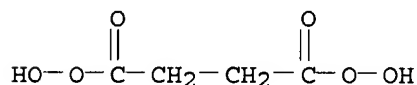
LA German

CC 3-2 (Biochemical Interactions)

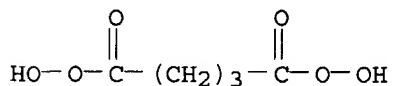
AB Peroxycarboxylic acids exhibit antimicrobial and **disinfectant** activities as a result of their oxidative effects, and these activities were determined for several preps. against a variety of organisms and under different conditions. Organic peracids for **disinfectants** use were

best prepared immediately prior to application by combining the organic acids with a peroxide source and then using the resultant equilibrium system. The bactericidal activities of several peroxycarboxylic acids were superior to those of H<sub>2</sub>O<sub>2</sub>.

- ST peroxycarboxylate antimicrobial **disinfectant**; carboxylate peroxy antimicrobial **disinfectant**
- IT **Bactericides, Disinfectants and Antiseptics**  
(peroxycarboxylic acids as)
- IT Carboxylic acids, biological studies  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
(peroxy, antimicrobial and **disinfectant** activity of)
- IT 79-21-0 93-59-4 2279-96-1 28317-46-6 71427-18-4  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
(antimicrobial activity of)
- IT 71427-25-3  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
(antimicrobial and **disinfectant** activity of)
- IT 7722-84-1, biological studies  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
(bactericidal activity of, peroxycarboxylic acids in relation to)
- IT 2279-96-1 28317-46-6  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
(antimicrobial activity of)
- RN 2279-96-1 HCAPLUS
- CN Butanediperoxoic acid (9CI) (CA INDEX NAME)



- RN 28317-46-6 HCAPLUS
- CN Pentanediperoxoic acid (9CI) (CA INDEX NAME)



- L85 ANSWER 52 OF 53 HCAPLUS COPYRIGHT 2004 ACS on STN
- AN 1978:152037 HCAPLUS
- DN 88:152037
- ED Entered STN: 12 May 1984
- TI Aqueous **perglutaric acid** solution
- IN Eggensperger, Heinz; Beilfuss, Wolfgang
- PA Schuelke und Mayr G.m.b.H., Fed. Rep. Ger.
- SO Ger., 5 pp.  
CODEN: GWXXAW
- DT **Patent**
- LA German
- IC C07C179-10
- CC 23-16 (Aliphatic Compounds)
- FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	-----	-----	-----	-----

PI	DE 2654164	B1	19771222	DE 1976-2654164	19761130 <--
	DE 2654164	C2	19780810		
	CH 635576	A	19830415	CH 1977-11780	19770927 <--
	AT 7707115	A	19790915	AT 1977-7115	19771005 <--
	AT 356289	B	19800425		
	FI 7703245	A	19780531	FI 1977-3245	19771031 <--
	FI 60099	B	19810831		
	FI 60099	C	19811210		
	NL 7712569	A	19780601	NL 1977-12569	19771115 <--
	NL 188641	B	19920316		
	NL 188641	C	19920817		
	SE 7712986	A	19780531	SE 1977-12986	19771117 <--
	SE 440848	B	19850826		
	SE 440848	C	19851205		
	BE 860976	A1	19780316	BE 1977-182746	19771118 <--
	FR 2371930	A1	19780623	FR 1977-35167	19771123 <--
	FR 2371930	B1	19800822		
	NO 7704063	A	19780531	NO 1977-4063	19771128 <--
	NO 140346	B	19790507		
	NO 140346	C	19790815		
	BR 7707882	A	19780711	BR 1977-7882	19771128 <--
	ZA 7707072	A	19780927	ZA 1977-7072	19771128 <--
	US 4129517	A	19781212	US 1977-855461	19771128 <--
	CA 1081079	A1	19800708	CA 1977-292034	19771129 <--
	DK 7705317	A	19780531	DK 1977-5317	19771130 <--
	JP 53081619	A2	19780719	JP 1977-143824	19771130 <--
PRAI	DE 1976-2654164		19761130 <--		

AB Aqueous **perglutaric acid** solns. **stabilized** by excess H<sub>2</sub>O<sub>2</sub> and urea or pyridinedicarboxylic acids, useful as **disinfectants**, oxidizing reagents, and bleaching agents, were prepared from glutaric anhydride. Peracid solns. prepared similarly from maleic or succinic anhydrides were not as **stable**.

ST **perglutaric acid stabilizer**; bactericide  
**perglutaric acid**; disinfectant  
**perglutaric acid**; oxidant **perglutaric acid**; bleaching **perglutaric acid**; glutaric acid hydrogen peroxide

IT **Bactericides, Disinfectants and Antiseptics**  
 Bleaching agents  
 (**perglutaric acid**)

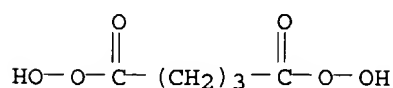
IT 3851-97-6P **28317-46-6P**  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation and bactericidal properties of)

IT 57-13-6, uses and miscellaneous 89-00-9 499-83-2  
 RL: USES (Uses)  
 (**stabilizer**, for **perglutaric acid** solns.)

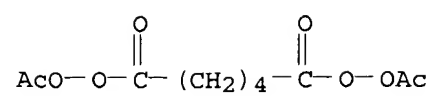
IT **28317-46-6P**  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation and bactericidal properties of)

RN 28317-46-6 HCAPLUS

CN Pentanediperoxoic acid (9CI) (CA INDEX NAME)



ED Entered STN: 22 Apr 2001  
 TI Diperoxycarboxylic anhydrides and their urea adducts as peroxy acid precursors  
 AU Heslinga, L.; Schwaiger, W.  
 CS Unilever Res. Lab., Vlaardingen, Neth.  
 SO Recueil des Travaux Chimiques des Pays-Bas (1966), 85(1), 75-85  
 CODEN: RTCPA3; ISSN: 0165-0513  
 DT Journal  
 LA English  
 CC 33 (Aliphatic Compounds)  
 AB Unbranched aliphatic diperoxycarboxylic acids of short chain length were included in urea (I) by acetylation in the presence of I. Diacetic diperoxycarboxylic anhydrides thus **stabilized** react with aqueous H<sub>2</sub>O<sub>2</sub> at room temperature to give mixts. of AcOOH and diperoxycarboxylic acid in high yield. Thus, (HOOCCH<sub>2</sub>)<sub>2</sub> (2.5 g.) was mixed with 9.2 g. urea and 3 g. Ac<sub>2</sub>O was added with vigorous stirring. The reaction temperature rose from  
 20 to 40°. The mixture was stirred one hr. at 35° and HOAc was removed in vacuo over KOH until constant weight was achieved to give (AcOOCH<sub>2</sub>)<sub>2</sub> (II) as a I inclusion compound Degree of inclusion was almost quant. and active O was 90% of theory. Similarly prepared were the I inclusion compds. of AcOOOC(CH<sub>2</sub>)<sub>4</sub>COOOAc (III) and AcOOOC(CH<sub>2</sub>)<sub>7</sub>COOOAc. Weight ratio of hexagonal I to included peroxy acid was invariably 2.8. III was isolated from its inclusion compound by extraction from ice-water with Et<sub>2</sub>O.  
 The extract was dried over Na<sub>2</sub>SO<sub>4</sub> and evaporated and the **crystallization** residue **recrystd.** from 1:2 EtOAc-petroleum ether to give pure III which exploded on grinding or exposing to a naked flame, m. 61-2°, and had an active O content of 121 mg./g. The I inclusion compound of H was not shock or heat sensitive. Perhydrolysis of the inclusion peroxyanhydrides in alkaline perborate solution (pH 10) at 20° gave the mixed peroxy acids in yields of 69 to 92% as determined by iodometric titration Non-included (HOOC(CH<sub>2</sub>)<sub>2</sub>COO)<sub>2</sub> also formed peroxy acids under these conditions while n-acyl peroxides did not.  
 IT Chemical compounds  
     (clathrate, of diacyl peroxides and urea)  
 IT X-rays  
     (diffraction of, by urea inclusion compds. with diacyl peroxides)  
 IT Explosions  
     (of adipolybis[acetyl peroxide], urea inclusion compound prevention of)  
 IT Peroxide, adipoylbis[acetyl, compound with urea  
     Urea, compds. of, with azelaoylbis[acetyl peroxide]  
     Urea, compds. of, with succinylbis[acetyl peroxide]  
 IT 57-13-6, Urea  
     (compds. of, with acetyl lauroyl peroxide)  
 IT 57-13-6, Urea  
     (compds. of, with adipolbis[acetyl peroxide])  
 IT 105-74-8, Lauroyl peroxide 123-23-9, Peroxide, bis(3-carboxypropionyl)  
     762-16-3, Octanoyl peroxide 5762-50-5, Peroxide, acetyl  
     3-carboxypropionyl 5762-51-6, Peroxide, succinylbis[acetyl, compound with  
     urea 6039-31-2, Peroxide, acetyl lauroyl, compound with urea  
     6039-32-3, Peroxide, adipoylbis[acetyl 6166-48-9, Peroxide,  
     azelaoylbis[acetyl, compound with urea  
     (preparation of)  
 IT 6039-32-3, Peroxide, adipoylbis[acetyl  
     (preparation of)  
 RN 6039-32-3 HCAPLUS  
 CN Peroxide, (1,6-dioxo-1,6-hexanediyl)bis[acetyl (9CI) (CA INDEX NAME)



=>